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Managing Editor regrets the republication of "A Preliminary Study of the Private Sector of Nepal's Manufacturing Industry" by Alex Kondos in Vol. 18, No. 1 which was already published in Vol. 14, No. 2.

THE MAITHILI VOWELS

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Introduction

This paper¹ puts forward the description, classification and phonemic analysis of the vowels and diphthongs of a variety of the 'standard' dialect of Maithili.² It also includes brief discussions on the vowel clusters in Maithili. The main conclusions are summarised at the end of this paper.

Vowels can be defined in terms of both phonetics and phonology. Phonetically, they are sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible frication; the air escapes evenly over the centre of the tongue. If the air escapes solely through the mouth, the vowels are said to be oral. If, on the other hand, some air is simultaneously released through the nose, the vowels are said to be nasal. From a phonological point of view, vowels are those units which function as the focus of syllables.

Vowel segments are a great deal more difficult to describe than consonant segments. Almost all consonant segments are made with a stricture involving contact of relatively large areas of active as well as passive articulators. Since the contacts involved in the production of any given consonant can be ascertained fairly easily, such contacts usually provide a convenient basis for consonant description. But vowel segments are usually made with 'open approximation' of the articulators. For this reason, they involve little contact, sometimes none at all. They are therefore, literally, less 'tangible' than consonants.

Articulatorily, vowels may be described and classified in terms of such main factors as: (1) vertical tongue position (high-low), (2) horizontal tongue position (front-back), (3) lip position (rounded-unrounded), and (4) velic closure (oral-nasal).

Description, Classification and phonemic Analysis of the Maithili Vowels

Maithili has sixteen phonologically distinctive vowel segments- i.e. eight oral vowels /i e æ a ə ɔ o u/ eight nasal vowels: /ĩ ẽ ã ă ǣ ǫ ũ/, and two phonologically distinctive oral diphthongs /di/ and /du/. The length of vowels is not phonologically distinctive in Maithili, although the Devnagari script in which this language is now written does provide some separate graphemes for 'long' and 'short' vowels. At the level of surface phonology, however, Maithili has instances of long and short vowels. Hence, variations in the length of vowels, whether oral or nasal, are completely allophonic in Maithili: the long allophonic variants occur mainly in stressed syllables, while the short ones occur in unstressed syllables. This section classifies and describes the Maithili vowels and also presents their phonemic analysis.

The Oral Vowels in Maithili: The Maithili oral vowels /i e æ a o u/ may be classified into the following three main categories: (1) front vowels, (2) central vowels, and (3) back vowels.

The Front Vowels in Maithili: Maithili has three front vowels /i/, /e/ and /æ/. The Maithili /i/ may be described as a high front unrounded oral vowel. It has two major allophonic variants at the surface phonological level - i.e., [i:] and [i]. In the production of the Maithili [i:], the front of the tongue is raised to a height slightly below and behind the close front position; the lips are spread; the soft palate is in a raised position; the tongue is tense, with the side rims making a firm contact with the upper molars. [i], on the other hand, is the short allophonic variant of the Maithili /i/, and it is pronounced with a part of the tongue positioned nearer to centre than to front and raised just above the half-close position; the lips are loosely spread; the soft palate is in a raised position; the tongue is relatively lax, with the side rims making a light contact with the upper molars. Both [i:] and [i] occur in all word positions: initial, medial and final.

The Maithili /e/ may be described as a mid front unrounded oral vowel. In the pronunciation of its long allophonic variant [e:], the front of the tongue is raised almost half-way towards the hard palate; the lips are unrounded; the soft palate is in a raised position; the tongue is fairly tense, the side rims making a contact with the upper molars. [e:] occurs in all word positions. But in pronouncing the short allophonic variant [e], the front of the tongue is raised between the half-open and half-close positions; the lips are loosely spread and are slightly wider apart than for [i]; the soft palate is in a raised position; the tongue is relatively lax, the side rims making a light contact with the upper molars. [e] does not occur word-finally.

The Maithili /æ/ may be described as low front unrounded oral vowel. In pronouncing its long allophonic variant [æ:], the mouth is slightly more open than for [e:]; the front of the tongue is raised just below the half-open

position, with the side rims making a contact with the back upper molars; the lips are neutrally open; the soft palate is in a raised position. [æ:] occurs in all word positions, and there is a tendency to diphthongise it. The short allophonic variant [æ], on the other hand, is drawn towards the central position. In pronouncing [æ], the opening between the jaws is medium; the lips are unrounded; the soft palate is in a raised position; the tongue is somewhat retracted and lax, with the side rims making a very slight contact with the back upper molars. [æ] does not occur word-finally.

The three front vowels in Maithili, /i e æ/, show full phonological opposition in all word positions: initial, medial and final. For example:

Initial	Medial	Final
/is/ 'expression of pain'	/git/ song	/ki/ 'what'
/æ:s/ 'luxury'	/gæt/ 'will sing'	/kæ/ 'vomit'
/ila/ 'bring this'	/pit/ 'beat (imp.)'	/Ji/ 'yes'
/ela/ 'came'	/pet/ 'stomach'	/je/ 'which; that'
/æna/ 'looking glass'	/jæb/ 'will go'	/gæ/ 'cow'
/ena/ 'like this'	/jeb/ 'pocket'	/ge/ 'hi! (feminine)'

Of all these three front vowels in Maithili, /æ/ occur the least frequently. The short allophonic variants of these front vowels occur only in unstressed syllables. [i] occurs in all word positions; [e] and [æ], on the other hand, occur only word initially and word medially. For example:

Initial	Medial	Final
[ij]la:s] 'court'	[bi]na:] 'without'	[ra:ti] 'night'
[e]kð:r] 'his/her'	[ke]na:] 'how'	_____
[æ]la:] '(he) came'	[pæ]ta:] '(he) will get'	_____

The Central Vowels in Maithili: Maithili has two central vowels: /a/ and /ə/. The Maithili /a/ may be described as a low central unrounded oral vowel. In the articulation of its long allophonic variant [a:], there is a considerable separation of the jaws and the lips are neutrally open; the soft palate is in a raised position; a part of the tongue between the centre and back is in the open position, and there is no contact between the rims of the tongue and the upper molars. The Maithili [a:] is really a central vowel, and not as open as the English (RP) /a:/. The Maithili [a:] occurs in all word positions-initial, medial and final. The short allophonic variant [a], on the other hand, is slightly higher than [a:]. In the pronunciation of [a], the opening between the jaws is narrower than in the case of the long [a:]; and a part of the tongue between the centre and back is raised up. In articulating both [a:] and [a], the tongue is rather lax, and no diphthongising tendency is noticeable. [a] does not occur word-finally.

The Maithili /ə/ may be described as a mid central unrounded oral vowel.

Its long allophonic variant [ɔ:] has the quality of a central vowel with neutral lip position. [ɔ:] occurs in all word positions. The short allophonic variant [ɔ], on the other hand, has a high frequency of occurrence in unstressed syllables. It is also pronounced with a neutral lip position, raising the tongue between half-open and half-close, and it seems to advance to some extent towards the front, though basically it is also a central vowel. [ɔ], too, occurs in all word-positions.

Both /a/ and /ə/ show full phonological contrast in all word positions: initial, medial and final. For example:

Initial		Medial		Final	
/an/	'bring'	/kal/	'time: enemy'	/'para/	'a buffalo calf'
/ən/	'grain'	/kəl/	'machine'	/'parə/	'dig (imp.)'

It should be mentioned /ə/ occurs much more frequently in non-final word positions, and that in the word final position /ə/ occurs mainly in the imperative construction. In the above examples, the long allophonic variants of /a/ and /ə/ occurred. As stated above, these central vowels also have their short allophonic variants, [a] and [ə], both of which occur mainly in unstressed syllables. [a] does not occur word-finally; [ə], on the other hand, occurs in all word positions. For example:

Initial		Medial		Final	
[ākɑ:rə]	'shape'	[ba'ca:lə]	'eloquent'		
[ə'mɑ:rə]	'immortal'	[jə'di:]	'if'		
				['pu:lə]	'bridge'

The Back Vowels in Maithili: Maithili has three back vowels -/ɔ/, /o/ and /u/. The Maithili /ɔ/ may be described as a low back rounded oral vowel. Its long allophonic variant, [ɔ:], is articulated with medium lip-rounding; the back of the tongue is raised between the half-open and half-close positions; no contact is made between the tongue and the upper molars. [ɔ:] occurs in all word positions. In the articulation of the short allophonic variant, [ɔ], the raising of the tongue, in so far as the height is concerned, is almost the same as in the case of [ɔ:], but the raised part is nearly in the middle of the tongue rather than at its back; the rounding of the lips is a little greater in the case of [ɔ] than in [ɔ:]. [ɔ] does not occur word-finally.

The Maithili /o/ may be described as a mid-back rounded oral vowel. Its long allophonic variant, [o:], is articulated by raising the mid part of the back of the tongue towards the soft palate; the lips are rounded; the soft palate is in a raised position. The short allophonic variant [o] seems to be advanced midway between the back and the central positions. The lips are rounded to a greater extent in the case of [o] than in that of [o:]. In articulating both [o:] and [o], the opening between the jaws is narrow and no contact is made between the tongue and the upper molars. The two variants occur in all word positions.

The Maithili /u/ be described as a high back rounded oral vowel. Its long allophonic variant, [u:], is a back close vowel. It is pronounced with the back of the tongue raised up; the lips tend to be closely rounded; the soft palate is in a raised position; the tongue is rather tense, though no firm contact is made between the tongue and the upper molars. The short allophonic variant, [u], on the other hand, is pronounced with a part of the tongue nearer to the centre than to back raised just above the half-close position; the lips are closely but loosely rounded; the soft palate is in a raised position; the tongue is relatively lax, with no firm contact made between the tongue and the upper molars. Both [u:] and [u] occur in all word positions.

All these three back vowels in Maithili, /ɔ o u/, show full phonological opposition in all word positions: initial, medial and final. For example:

Initial		Medial		Final	
/ɔr ^h /	'out of sight'	/kɔr/	'morsel'	/hɔ/	'whoa!'
/or ^h /	'wrap (imp.)'	/kor/	'edge'	/ho/	'also'
/ot ^h /	'lip'	/b ^h oɽ/	'feast'	/p ^h ero/	'again'
/ut ^h /	'get up (imp.)'	/bhuɽ/	'fry (imp.)'	/p ^h eru/	'turn aside'
/o'sar/	'verandah'	/bhor/	'morning'	/ko'ro/	'bamboo pole'
/u'sar/	'retreat (imp.)'	/bhur/	'hole'	/ko'ru/	'(please) dig'

Of all these three back vowels, /ɔ/ is the least frequent—especially in non-medial positions. The long allophonic variants of /ɔ o u/ occurred in the above examples. But these vowels also have their short allophonic variants, which occur in unstressed syllables. [ɔ] does not occur word finally; [o] and [u], on the other hand, occur in all word positions. For example:

Initial		Medial		Final	
[ɔ'ta:]	'will come'	[kɔ'ra:]	'food given to a dig'		
[o'kɔ:r]	'his/her'	[ko'dari]	'spade'	[to:ro]	'yours too'
[u'sa:sɔ]	'consolation'	[nu'kæ.lɔ]	'hidden'	[mɔ:d ^h u]	'honey'

The High, Mid and Low Vowels in Maithili: Maithili has three degrees of vowel height, which may be termed high, mid and low. The high vowels are /i/ and /u/, and they show full phonological opposition in all word positions: initial, medial and final. For example:

Initial		Medial		Final	
/i'nar/	'well (n)'	/kit/	'fix (imp.)'	/tari/	'palm juice'
/u'nar/	'unbalanced'	/kut/	'hard cover (e.g. of a book)'	/taru/	'please fry'

The mid vowels in Maithili, /e ə o/, also show full phonological contrast in all word positions. For example:

Initial	Medial	Final
/e'na/ 'like this'	/'kera/ 'banana'	/hē/ 'hai'
/o'na/ 'like that'	/'kora/ 'lap'	/ho/ 'become'
/e'kəɾ/ 'acre'	/per/ 'tree'	/'mare/ 'many'
/'kəɾ/ 'boast'	/pəɾ/ 'lie down (imp.)'	/'marə/ 'beat (imp.)'

The low vowels in Maithili, /æ aɔ/, also show full phonological contrast in all word positions. For example:

Initial	Medial	Final
/æʂ/ 'luxury'	/pær/ 'leg'	/bhæ/ 'brother'
/as/ 'hope'	/par/ 'across'	/b ^h a/ 'pretention'
/ɔ'ta/ 'will come'	/s r/ 'sky'	/sɔ/ 'hundred'
/a'ta/ 'a kind of fruit'	/sar/ 'wife's brother'	/sa/ 'a musical note'

Based on the above description, the Maithili oral vowels are charted on the 'standard' vowel diagram in Figure 1. It should be mentioned here that these oral vowels have been charted in the diagram presented in Figure 1 on a purely impressionistic basis. The impressions, however, include those of

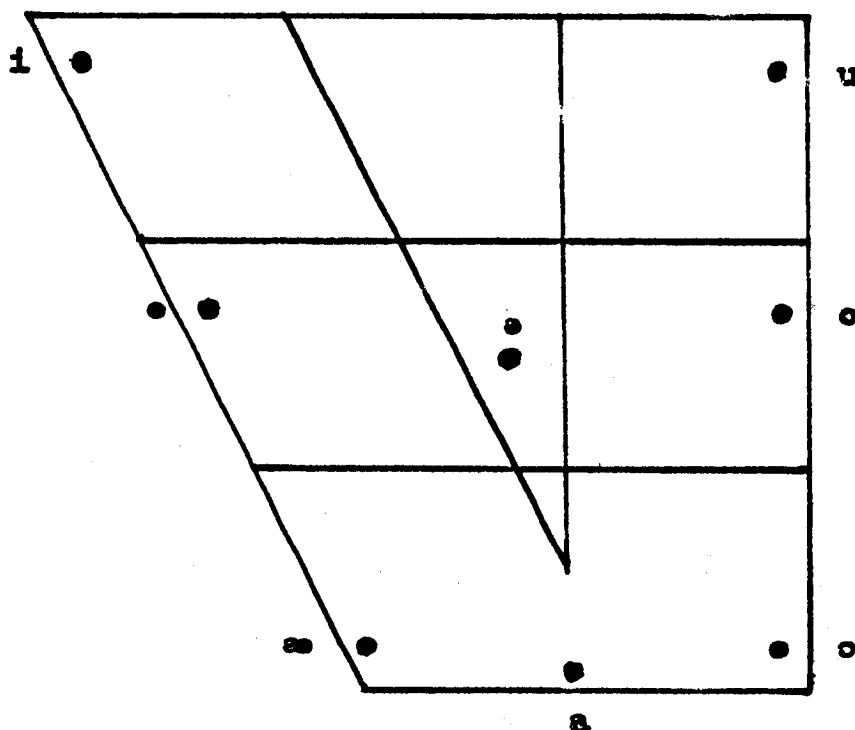


Figure 1: The Maithili oral vowels

other trained phoneticians (e.g. S. Jha, 1941: 40 and 1958: 65; G. Jha, 1974: 58 and 1979: 7; R. Yadav, 1979: 149) as well (also see S.K. Jha, 1984: 87-134, for the acoustic analysis of these vowels as well as for the average frequency values of F_1 and F_2 for these vowels spoken in different contexts and plotted on a number of formant charts). All the eight oral vowels in Maithili and their major allophonic variants are summarized and presented in Figure 2.

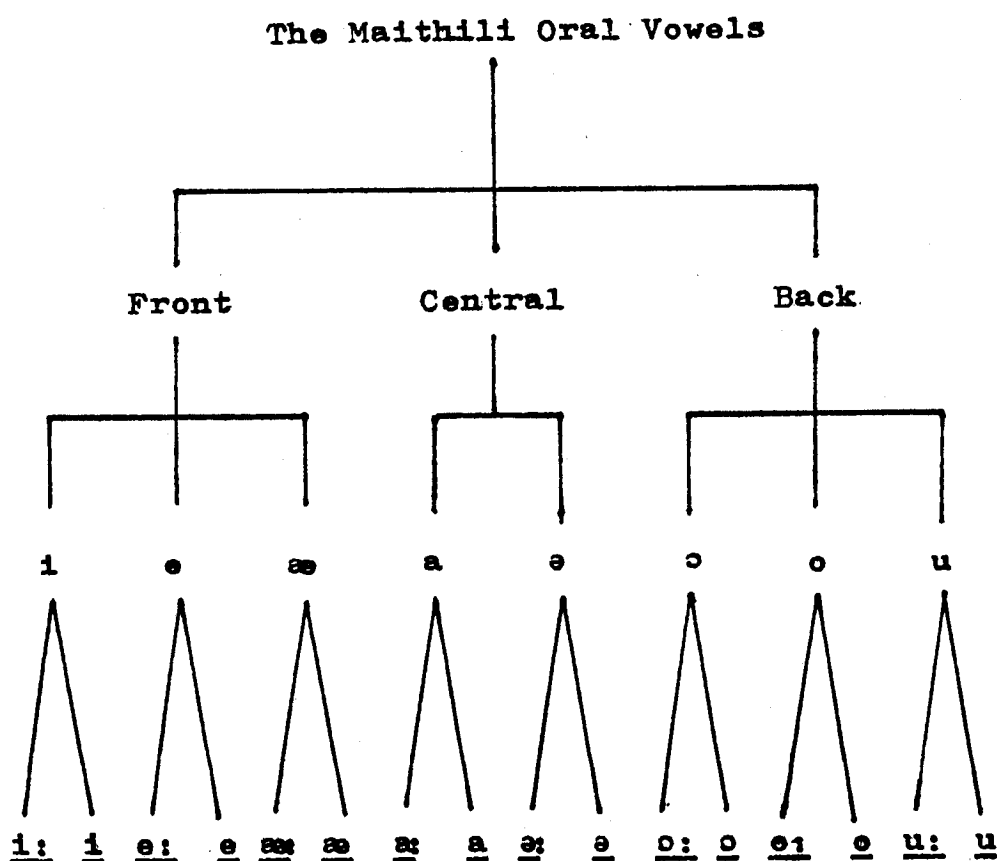


Figure 2: The Maithili oral vowels and their major allophonic variants

The Nasal Vowels in Maithili: The term 'nasal' is traditionally used in the phonetic classification of speech sounds on the basis of their manner of articulation. In the production of nasal sounds the velum is lowered and the nasal cavity is thus linked with the vocal tract below it. An airstream from the lungs may then pass through the "nasal port" into the nasal cavity.

Simultaneously, the airstream also enters the oral cavity. Modifications of the airflow by action of the tongue, teeth or lips or both may later give rise to various kinds of nasal sounds. In Maithili, both consonants and vowels may be articulated in this way. In the case of nasal vowels, air escapes through both the nose and the mouth simultaneously. The nasal vowels are transcribed with [̃] above the symbol - e.g., [ĩ̃], [õ̃], and so on.

Like in many other languages - e.g., French, Portuguese, Hindi and Gujarati - Maithili nasal vowels are opposed to oral vowels. Nasality is therefore an essential identifying feature of the vowel sounds in Maithili. All the eight oral vowels of Maithili have their phonologically distinctive nasal counterparts too - i.e., /ĩ̃ ē̃ ã̃ õ̃ ẽ̃ ẽ̃ ẽ̃ ẽ̃/. These nasal vowels are produced almost exactly like their oral counterparts, with the exception that during their production the soft palate is in a lowered position so that air escapes evenly through the nose.

The nasal vowels of some languages, like Slavic and French, for example, are said (e.g. see Lightner 1970; Ruhlen 1973, for more details) to be realizations of underlying vowel plus nasal (VN) sequences. Unlike Slavic and French, the nasal vowel in Maithili are truly phonemic. That is, in current Maithili, there are plenty of words where nasal vowels occur in non-nasal consonantal environments. Even in the same consonantal contexts they all show full phonological contrasts with their oral counterparts. In other words, whether it be the case of slow, formal or less formal speech, a nasal vowel in Maithili occurring in environments of non-nasal consonants exists as a phonologically distinct nasal vowel, and not as sequence of vowel plus nasal (for historical details of the nasal vowels of some modern Indo-Aryan languages, including Maithili, see, for example, Chatterji 1926/1970, 1960; S. Jha 1958). This does not, however, mean that the phonetic nasalization of vowels does not occur in Maithili. As discussed at some length in Jha (1984), a derived level non-nasal vowel in Maithili, is phonetically nasalized at the surface level, whenever the vowel in question occurs in the vicinity of any nasal consonants.

The oral and nasal vowels in Maithili show phonological opposition in all word positions: initial, medial and final. For example:

Initial Position

/i'ta/	'only this'	/õ̃'hi/	'only this (place/thing)'
/i'ta/	'brick'	/õ̃'hi/	'only you'
/ek/	'one'	/ot/	'will come'
/ẽr/	'heel'	/õt/	'boil (imp.)'
/æ/	'expression of contempt'	/ó/	'he/she'
/ã̃/	'what'	/õ̃/	'a groaning sound'

/a^h/ 'eight'
/ā/ 'courage'

/u^h/ 'awake'; 'get up'
/ũ/ 'camel'

Medial position

/čhi/ 'scatter'
/č^hi/ 'garment dyed with spots'
/b^hē/ 'see'; 'get in touch'
/b^hē/ 'a kind of water plant'
/b^hæt/ 'will become'
/b^hæ/ 'kind; type'
/bas/ 'shelter; dwelling place'
/bās/ 'bamboo'

/kə̃t̪gə̃r/ 'commendable; adequate'
/kə̃t̪gə̃r/ 'thorny'
/gət/ 'will sing'
/gə̃t/ '(cattle) urine'
/g^hot/ 'mix (imp.)'
/g^hōt/ 'swallow'
/sūr/ 'brave (person)'
/sūr^h/ '(elephant's) trunk'

Final Position

/kə̃'hi/ '(I/you) say'
/kə̃'hī/ '(what) if'
/me/ 'May'
/mē/ 'in'
/sæ/ 'thus'; 'that way'
/sæ̃/ 'husband'

/hə̃/ 'oh!'
/hə̃/ 'yes'
/b^hə̃/ 'price'
/b^hō̃/ 'eyebrow'
/kə̃'so/ 'get tightened (imp.)'
/kə̃'sō̃/ 'small hole from which
water leaks in the field'
/kə̃'hu/ '(you) say'
/kə̃'hū̃/ 'somewhere'; 'in case'

Of the eight nasal vowels in Maithili, /ĩ ẽ õ ũ/ have both long and short allophonic variants: the long variants occur mainly in stressed syllables; the short ones occur in unstressed syllables. The short [ĩ] and [ũ] occur in all word positions: initial, medial and final. For example:

Initial

[ĩ̃ jə̃: tə̃] 'light'
[ũ̃'ka:] 'the high
one'

Medial

[hĩ̃ sa: bə̃] 'account'
[sũ̃'riani:] 'a hamlet
of brewers'

Final

[bā̃: hi] 'arm'
[kə̃h'lə̃:hū̃] '(I) said'

But the short [ə̃] occurs mainly word initially and word medially, whereas [ō̃] occurs primarily in the word-medial position. For example:

Initial

[ə̃'hi:] 'only you'

Medial

[kə̃'hī:] 'what) if'
[tō̃ti'æ:l] 'seedling becoming apparent'

The remaining four nasal vowels, i.e., /ẽ æ ă ǣ/, occur primarily in stressed syllables, and they all have only one variant each. All the Maithili nasal vowels and their major allophonic variants are summarized and presented in Figure 3 below:

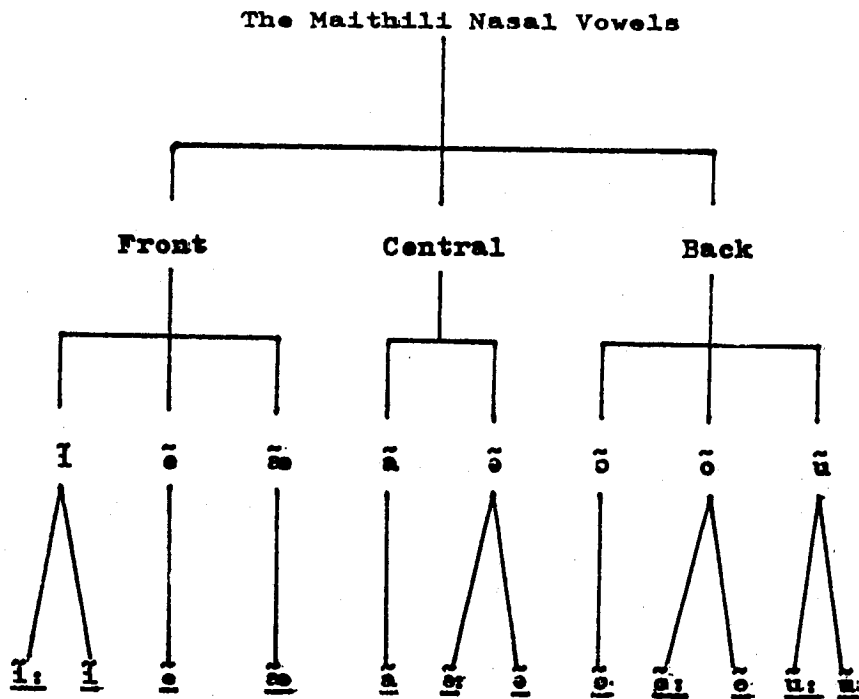


Figure 3: The Maithili nasal vowels and their major allophonic variants.

The Diphthongs in Maithili: Like many other languages, Maithili has some vowel segments whose quality is not constant. That is to say, it changes continually while the vowel is being uttered. The technical term for a vowel of continually changing quality is a 'diphthong'. Maithili has two such diphthongs, /ði/ and /du/, and both of them are phonologically distinctive. They can be described and identified in terms of their beginning and ending

points, which form a glide within one and the same syllable. Both Maithili diphthongs have their first element in the region of [ə] and their second element is either in the region of [i] or in that of [u]. Most of the stress associated with these diphthongs is concentrated on the first element, whereas the second element is only lightly sounded, although it is usually longer than the first element. The two diphthongs may briefly be described in the following way:

For the production of the Maithili /əi/, the mouth remains in a position between half-close and half-open. The tongue glide begins at a central position, and then moves in the direction of the Maithili /i/, with a slight closing movement of the lower jaw. The lips change from a neutral to a loosely spread position; the soft palate is in a raised position, and as a result air escapes only through the oral cavity.

For the production of the Maithili /əu/, the mouth position remains between half close and half open. The tongue glide begins at a central position, and then moves in the direction of the Maithili /u/, with a slight closing movement of the lower jaw. The lips are neutral for the first element, i.e., for [ə], but they have a tendency to round on the second element, [u]. During the production of this diphthong, the soft palate remains in a raised position, and, as a result, air escapes only through the oral cavity.

The two Maithili diphthongs, /əi/ and /əu/, show full phonological contrast in all word positions. For example:

Initial

/əik^hen/ 'at this time'
/əuk^hən/ 'even at this time'

Medial

/kəil/ 'of a white colour'
/kəu^hl/ 'small mill'

Final

/kəhə l'kəi/ 'someone said (something to a third person)'
/kəhə l'kəu/ 'someone said (something to a second person)'

The acoustic analysis of these diphthongs is found in Jha (1984: 117-131).

Vowel Clusters in Maithili

As pointed out earlier a diphthong is usually defined as a sequence of two perceptually different vowel sounds within one and the same syllable. But a sequence of two vowels which occupy two syllables is not a diphthong in the real sense of the term. In Maithili, we have several examples of two as well as of even three vowel clusters.

Two-vowel Clusters in Maithili: Given below are a few examples of those two vowel clusters that occur in Maithili in the word-initial position:

ði-	/ʔɪtʰam/	'at this place'	ðe-	/ʔɛta/	'(he) will come'
ðu-	/ʔuta/	'will come'	ai-	/ʔai/	'today'
oi-	/ʔoitʰam/	'there'; 'at that place'			

similarly, the two-vowel clusters that occur in the word-medial position in Maithili are, for example:

-ie-	/ʔsieta/	'will get sewn'	-iæ-	/si'æɪ/	'stitched/sewn'
-ið-	/ʔpier /	'yellow'	-ia	/ʔdieð/	'kin'
-ic-	/di'cr/	husband's younger brother	-ði-	/ʔbðis/	'sit (imp.)'
-ðe-	/bð'es/	'age'	-ðo-	/kðrbð'ota/	'will get done'
-ðu-	/ʔjʰðul/	'confused noise'	-ai-	/ʔbail/	'crop'
-æ-	/ʔpael/	'the act of getting'	-ao-	/paot/	'will get'
-au-	/ʔbaul/	'sand'	-oi-	/ʔkoila/	'coal'
-oe-	/dʰo'eta/	'will get washed'	-oa-	/po'ar/	'straw'
-ui-	/pu'ir/	'fill up'	-ue-	/kʰu'eta/	'will make eat'
-uæ-	/ju'æɪ/	'matured'	-ua-	/ju'ari/	'gambler'

Likewise, the two-vowel clusters that occur in the word-final position in Maithili are, for example:

-ið	/dið/	'(please) give'	-iæ	/ki'æ/	'why'
-ia	/ʔpia/	'lover'; 'husband'	-io	/ʔsio/	'get stitched/sewn'
-iu	/ʔpiu/	'(please) drink'	-ði	/ʔlði/	'paste'
-ða	/lð'a/	'go and bring'	-ðu	/ʔçðu/	'jaw'
-ai	/kð'sai/	'butcher'	-æ	/ʔmae/	'mother'
-au	/ʔbau/	'a form of address used for a boy'	-oi	/ʔloi/	'a lump of moist flour'
-oa	/ʔdʰoa/	'whitened'	-ui	/ʔsui/	'needle'
-ua	/ʔjua/	'gambling'			

All the above mentioned two-vowel clusters in Maithili are summarized and presented in Table 1 below:

Table 1: Two-vowel Clusters in Maithili

V ₂	i	e	æ	ə		c	o	u
V ₁								
i		+	+	+	+	+	+	+
e								.
æ								
ə	+	+						+
	+	+		+			+	+
c								
o	+	+		+				
u	+	+	+	+				

Three-vowel Clusters in Maithili: Maithili does not have any three-vowel clusters word initially, but it does have such clusters word medially and word finally. The word-medial three-vowel clusters in Maithili are mainly /-iau-/ and /-əuæ/. For example:

-iau- /pi'auj/ 'onion' -əuæ- /bəu'æl/ 'lost'
 /di'aul/ '(being) given' /həu'æl/ 'in a slumbering state'

The word-final three-vowel clusters in Maithili are mainly three: /iəu/, /oai/ and /-əua/. For example:

-iəu /'diəu/ '(please) give' -iau /bi'au/ 'give birth'
 /'liəu/ '(please) take' /ji'au/ 'make someone live'
 -əua /'kəua/ 'crow'
 /'nəua/ 'barber'

Summary of Conclusions

To sum up, there are eight oral vowels in Maithili: /i e æ ə ɔ o u/. These are classified and described in Table 2 below:

Table 2: Classification and description of the oral vowels in Maithili

Classification	Nos	Vowels	Description
1. Front Vowels	1	/i/	high front unrounded
	2	/e/	mid front unrounded
	3	/æ/	low front unrounded
2. Central Vowels	4	/a/	low central unrounded
	5	/ə/	mid central unrounded
	6	/ɔ/	low back rounded
3. Back Vowels	7	/o/	mid back rounded
	8	/u/	high back rounded

All these oral vowels have their phonologically distinctive nasal counterparts as well: /ĩ ē æ ă ǣ ɔ̃ ɔ̃ ɔ̃/. In addition, Maithili also has two phonologically distinctive oral diphthongs, /di/ and /du/. Thus, Maithili has a total of 18 phonologically distinctive vowel segments, i.e., 8 oral vowels, 8 nasal vowels, and 2 oral diphthongs.

The length of vowels is not phonologically distinctive in Maithili. This language nevertheless uses both long and short allophonic variants of its 8 oral vowels. The long allophonic variants, i.e. [i: e: æ: a: ɔ:ɔ: o: u:], occur mainly in stressed syllables; the short ones, i.e., [i e æ a ɔ ɔ o u], occur in unstressed syllables. Of the 8 nasal vowels in Maithili, /ĩ ē æ ă ǣ/ have only one variant each, which all occur primarily in stressed environments. The remaining four nasal vowels, /ĩ ǣ ɔ̃ ɔ̃/, have both the long [ĩ: ǣ: ɔ̃: ɔ̃:] and the short [ĩ ǣ ɔ̃ ɔ̃] allophonic variants. The former occurs in stressed syllables while the latter occurs only in unstressed environments. A final summary of the Maithili oral and nasal vowels as well as of their major allophonic variants is given in Figure 4.

As for the Maithili diphthongs, /di/ and /du/, most of the stress associated with both of them is always concentrated on the first element, while the second element is only lightly sounded. Maithili also has plenty of examples of two-vowel clusters occurring in all positions. There are only a few examples of three-vowel clusters, and such three-vowel clusters occur only in the word-medial and word final positions.

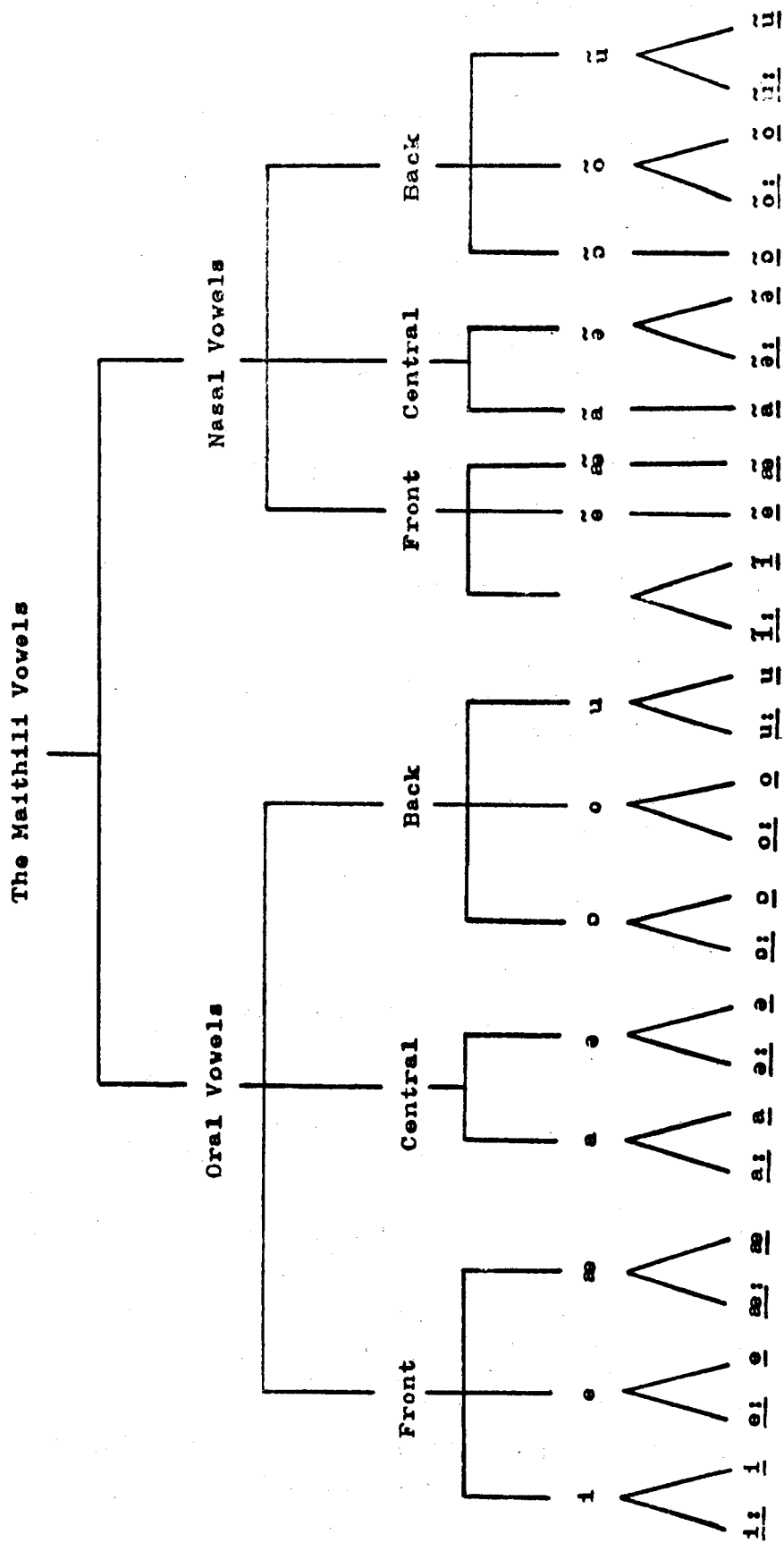


Figure 4: The maithili oral and nasal vowels and their major allophonic variants

Notes

1. This paper forms part of the second chapter of Jha's (1984) doctoral dissertation. The author is grateful to both Professor marcel A.A. Tatham and Dr. Jacques Durand of the Department of Language and Linguistics at Essex University (England) for their detailed criticisms, comments and suggestions on various versions of this study which have led to improvements in both style and in content.
2. For more information in connection with this variety of the standard dialect of Maithili, see Jha (1984:26-30).

References

- Chatterji, S.K. 1926/1970. *The Origin and Development of the Bengali Language*. 2 Vols. London: George Allen and Unwin.
- _____. 1960. *Indo-Aryan and Hindi*. 2nd. Ed. Ahmedabad (India): Gujarat Vernacular society,
- Jha, G. 1974. *Maithili Bhasaka Vikas* (The Development of the Maithili Language). Patna: Bihar Hindi Granth Academy (in Hindi).
- _____. 1979. *Uccatara Maithili Vyakarana* (A Higher Maithili Grammar). Patna: Maithili Academy (in Maithili).
- Jha, S. 1941. "Maithili Phonetics". *Indian Linguistics*, 8 (1940-1944), pp. 39-70.
- _____. 1958. *The Formation of the Maithili Language*. London: Louzac and Co.
- Jha, S.K. 1984. "A Study of Some Phonetic and Phonological Aspects of Maithili". Unpublished Ph. D. Thesis, University of Essex (England).
- Lightner, T.M. 1970. "Why and How Does Vowel Nasalization Take Place?" *Papers in Linguistics*, 2, pp. 197-226.
- Ruhlen, M. 1973. "Nasal Vowels". *Stanford University Working papers on Language Universals*, 12, pp. 1-36.
- Yadav, R. 1979. "Maithili Phonetics and Phonology". Unpublished Ph. D. Thesis, University of Kansas (U.S.A.).

CLITIC VERSUS AFFIX: MAITHILI *e* AND *o*

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Introduction

Certain bound morphemes (e.g., clitics and inflectional affixes) in Maithili present analytic difficulties because they are neither clearly independent words nor clearly inflectional affixes. This phenomenon is not unique to Maithili; similarly problematic forms exist in many languages of the world, including English. In traditional descriptions, these forms have been treated as being a *catagorematic* in that they do not readily fit into a standard description of 'parts of speech'.

This article investigates the process of cliticization in Maithili, specifically, the question of clitic vs. affix.

The *dramatis personae* for the present presentation are: *e o; hi hu he ho*. Of these, *e* and *o* are the two most common markers of emphasis or focus in Maithili.

The emphatic markers can be either inclusive or exclusive. The exclusive emphatic *e* translates into English as 'only', 'alone', while the inclusive emphatic *o* translates as 'even', 'also', 'too'. These markers attach to the end of a host word and are clearly enclitic, e.g.:

ram – e
'only Ram'

ram – o
'even Ram'

e and *o* are not the only markers of emphasis in Maithili. *hi*, *hu*, and *he*, *ho* also attach as emphatic markers, e.g.:

ham – hi
'only I'
o – he
'only be (NH)'

ham – hu
'even I'
o – ho
'even he (NH)'

This paper, taking cue from Zwicky and Pullum (1983), demonstrates that *e* and *o* alone should be described as clitics, and that *he*, *ho* and *hi*, *hu* should be treated as inflectional affixes.

Clitic vs. Affix

Zwicky and Pullum (1983) list a set of criteria for distinguishing clitics from inflectional affixes and arrive at an unconventional conclusion that the English contracted negator *n't* behaves like an inflectional affix rather than a clitic. Zwicky and Pullum's prominent criteria are:

- (A) degree of selection
- (B) arbitrary gaps in the set of combinations
- (C) morphophonological idiosyncrasies

Zwicky and Pullum's findings are briefly summarized below:

- A. The degree of selection between the clitics and the words preceding them is low; in other words, clitics can attach to words of virtually any category, e.g.:
1. Any answer not entirely *right's* going to be marked as an error.
Adjective
 2. The drive home *tonight's* been really easy. Adverb
 3. The person I was talking *to's* going to be angry with me.
Preposition
 4. *They've* all seen this movie before. Pronoun

The inflectional affixes, by contrast, are quite particular in their selection of stems. For instance, the past attaches only to verb stems; the superlative attaches only to adjective and adverb stems.

The contracted negator *n't* is highly selective, attaching only to auxiliary verbs, indeed only to the finite form of these verbs, e.g.:

5. I don't try not to pay attention; I just can't help it.
* tryn't
6. Well, for her not to understand is the last straw.
* hern't
7. * Would the police haven't been informed?
8. It would be a shame to have not EVER had a chance to see it.
* haven't

- B. Arbitrary gaps within a single category exist with regard to *n't* e.g.:
- * mayn't
 - * amn't

No positive counterpart is available for *ain't*. In addition, *ain't* also serves as the negative form of *have*, *has*, *sin*, and *are*, and *is* on an optional basis in varying dialects and styles.

C. *n't* also displays a number of morphophonological idiosyncrasies, e.g.:

do	don't	u → o	(vowel change)
will	won't	l → Ø	(deletion and vowel change)
		i → o	
shall	shan't	l → Ø	(deletion, but no vowel change)
must	musn't	t → Ø	(deletion accompanied by syllabicity)

The Maithili Data

Looking at the Maithili data (Table 1), it is immediately evident that the emphatic markers *e* and *o* can attach with virtually any category, i.e., they can attach with pronouns, nouns, adjectives, numerals, verbs, adverbs, etc.

Table 1

Pronouns			
1 person 'I'		2 person (MH/NH) 'You'	
ham	Nom.	tō	Nom.
hamra	Acc/Dat.	torā	Acc/Dat.
hamr-e		tor-e	
hamr-o		tor-o	
*hamrā-e		*torā-e	
*hamrā-o		*torā-o	
hamar	Poss.	tohar	Poss.
hamr-e		to(h)r-e	
hamr-o		to(h)r-o	
3 person (N) human 'He/She'		Proximate	
Remote			
o	Nom.	i	Nom.
hunkā	Acc/Dat.	hinkā	Acc/Dat.
hunk-e		hink-e	
hunk-o		hink-o	
*hunkā-e		*hinkā-e	
*hunkā-o		*hinkā-o	
hunkar	poss.	hinkar	Poss.
hunkar-e		hinkar-e	
hunkar-o		hinkar-o	

3 person (H) 'He/She'

Remote		Proximate	
o	Nom.	i	Nom.
okrā	Acc/Dat.	ekrā	Acc/Dat.
okr-e		ekr-e	
okr-o		ekr-o	
*okrā-e		*ekrā-e	
*okrā-o		*ekrā-o	
okar	Poss.	ekar	Poss.
okr-e		ekr-e	
okr-o		ekr-o	

Nouns

ram 'Ram' rām-e rām-o; leri 'calf' leri-e leri-o;
 beṭā 'son' beṭ-e beṭ-o *beṭā-e *beṭā-o

harre 'a herb' harre-e harre-o
 sairso 'mustard' sairso-e sairso-o
 Pō 'dawn' Pō-e Pō-o

Adjectives

ũc 'high' ũc-e ũc-o; lal 'red' lal-e lal-o;
 untā 'opposite' unṭe unṭ -o
 *untā-e *untā-o

Numerals

ek 'one' ek-e ek-o; du 'two' du-e du-o; tin 'three' tin-e tin-o

Verbs

aich 'is (3NH)'	cha-l-āh 'was (3H)
aich-e	cha-l-āh-e
aich-o	cha-l-āh-o
ge-l-āh 'went (3H)'	paṛh-t-āh 'will study (3H)'
ge-l-āh-e	paṛh-t-āh-e
ge-l-āh-o	paṛh-t-āh-o

Adverbs

tar 'under' tar-e tar-o; upar 'above' upr-e upr-o; lag 'near' lag-e lag-o;
 bāhar 'outside' bāhr-e bāhr-o; bhitār 'inside' bhitr-e bhitr-o

13. tō le-b-e
 'You will take'

Secondly, no idiosyncratic morphophonemic changes occur in our data; only those phonological changes occur which form a part of the general phonological properties of the Maithili language.

Two types of morphophonemic changes are found to occur in the data. The first ones, marked by asterisks, relate to the examples listed in Table 1. A general phonotactic constraint disallows the attachment of a vowel (in this case, the emphatic markers *e* and *o*) to a stem of more than one syllable and ending in an unstressed *ā*:

*hām(a)ra – e
 o

I - Acc/Dat-Emph

*tó ra – e
 o

you (NH) - Acc/Dat-Emph

*ó k(a)ra – e
 o

he (NH) - Acc/Dat-Emph

(Comments: (i) Maithili is basically a CVCV language. (ii) Vowel clustering within a syllable is permissible, but it tends to diphthongize. (iii) Closing diphthongs ending in *i* or *u* are the most common ones, e.g., *bhāi* 'brother'; *laṛāi* 'war'; *bāu* 'father'; dear boy'; *kaṭ-ā-u* 'have (it) cut')

The second morphophonemic change relates to a highly productive (almost exceptionless) rule of schwa deletion (of the type ... VCaCV → VC Ø CV):

- (a) The rule says that the final schwa of a verbal/adverbial or nominal stem is deleted if that stem is followed by a vowel initial morpheme, e.g.:

hamar-e	hamre	(Pronoun)
my-Emph	'only mine'	
kamar-o	kamro	(Noun)
waist-Emph	'even the waist'	
pajar-ā-eb	pajraeb	(Verb)
light fire-Caus-Inf	'cause to light fire'	
bāhar-e	bahre	(Adverb)
outside-Emph	'only outside'	

- (b) Schwa syncope does not occur if the schwa is preceded by a consonant cluster, e.g.:

Pustak + ālae	Pustakālae	'library'
---------------	------------	-----------

- (c) Schwa syncope does not occur if the schwa is followed by a consonant cluster:

Palang-o	Palango
cot-Emph	'Even the cot'

- (d) Even though schwa syncope does apply to a suffixed stem, it does not apply to a prefixed stem, e.g.:

a-samae	'inopportune'
be-parhal	'uneducated'
an-kahal	'stupid'

With inflectional affixes, idiosyncratic morphophonemic changes are quite common:

Kar-l-ainh	Kaelainh	r → Ø
do-Pst-(3H)	'did (3H)'	Ø → e
jā-t-āh	jaetāh	ā → a
go-Fut-(3H)	'will go (3H)'	Ø → e

Finally, the data listed under 'Compound names and Proper names' deserve attention (Table 2). They are interesting because in such examples the clitic is positioned after the first element of a larger unit with which the clitic is semantically associated. That is, say, in *Kāṭhomāṇḍu* *o* pertains to, i.e., emphasizes, *Kāṭhmāṇḍu* 'even *Kathmandu*', yet it is positioned after only the first constituent of *Kāṭhmāṇḍu*. This is reminiscent of Latin *Que* 'and' whose semantic effect is to conjoin an expression X to some earlier expression, even though it is positioned after the first constituent of X:

boni	pueri	bellae-que	puellae
		X	
good	boys	pretty-and	girls
		'good boys and pretty girls'	

Table 2

Compound Place and Proper Names

rāmpur rām-epur rām-opur rāmpur-e rāmpur-o
 rājnagar rāj-enagar raj-onagar rājnagr-e rājnagr-o
 Kāṭhmāṇḍu kāth-emāṇḍu kāth-omāṇḍu kāṭhmāṇḍu-e kāṭhmāṇḍu-o

Proper Names and/or Family Names

rām misr rām-e misr rām-o mise rām misr-e rām misr-o
 jhā jhā-e jhā-o yādab yādb-e yādb-o

The Maithili data further show (Table 3) that *hi hu* and *he ho* are attached to no grammatical category other than pronouns. There is thus a high degree of selection. Looking at their distributional properties, *he* and *ho* attach only to demonstrative pronouns, indeed only in the nominative case forms. *hi* and *hu*, on the other hand, attach only to demonstrative pronouns in the accusative-dative case forms, 1 and 2 HH, H, MH, NH in the nominative case forms, and to 2H,HH in the accusative-dative and possessive case forms. To sum up, like inflectional affixes, *he ho* and *hi hu* show a greater degree of selection, and they are extremely particular in their selection of hosts to which they can attach. Obviously, there are arbitrary gaps in the set of combinations even within a single category.

Table 3

Pronouns	
1 person 'I'	2 person (MH NH) 'You'
ham Nom.	tõ Nom.
ham-hi	tõ-hi
ham-hu	tõ-hu
2 person 'You'	
High Honorific	Honorific
apne Nom.	āhā
apni-hi	ā-hi
apna-hu	ā-hu
*apne-hi	*āhā-hi
*apne-hu	*āhā-hu
apne ke Acc/Dat	āhā ke
apna-hi ke	ā-hi ke
apna-hu ke	ā-hu ke
*apne-hi ke	*āhā-hi ke
*apne-hu ke	*āhā-hu ke
apne-k Poss.	āhā-k
apna-hi-k	ā-hi-k
apna-hu-k	ā-hu-k
*apne-hi-k	*āhā-hi-k
*apne-hu-k	*āhā-hu-k

Secondly, the idiosyncratic morphophonemic changes that occur in the attachment of *he ho* and *hi hu* are most typical of inflectional affixes rather

than of clitics, e.g.:

i-	he ho	→ e	he ho
i -	i → e hi ke	→ ahike	
i -	i → a hu ke	→ ahuke	
	i → a āhā-hu	→ āhu	
	hā → ∅ āhā-hi	→ āhi	
	hā → ∅ ohi-hu ke	→ ohu ke	
	hi → ∅ ohi-hi ke	→ ohi ke	
	hi → ∅		

Conclusion

Analysis of the Maithili data calls for a 'mixed' analysis of emphatic markers of Maithili. It is suggested that *e* and *o* should be treated as clitics, while *hi hu* and *he ho* should be treated as inflectional affixes.

Also, *hi hu* and *he ho* might be thought of as synthetic (inflectional) expressions of emphasis, while *e o* are analytic expressions of emphasis in Maithili. Comparison with the English *er* and *more* as synthetic and analytic markers of adjectival comparison might provide further support to this analysis.

Finally, one further independent motivation to treat *e* and *o* as clitics, rather than as inflectional affixes, comes from the following phonological fact of the Maithili sound system.

An important feature of the lexical phonology of Maithili is the $\bar{a} \rightarrow a$ rule which occurs regularly and systematically upon addition of a suffix containing a vowel, e.g.:

kāṭh	'wood'	kāṭhgar	'woody/hard'
māus	'meat'	mausgar	'meaty'
kām	'work'	kamāi	'wages/earning'
hāthi	'elephant'	hathini	'female elephant'
pākal	'ripe'	pakalhā	'the ripe one'
kāri	'black'	karikki	'the black one (female)'
māṭi	'soil'	matīā	'soily'
pāgal	'mad'	pagli	'mad woman'
		paglā	'mad man'

Note, however, that cliticization does not participate in the lexical phonology involving the a Æ a rule, e.g.:

kāṭh	'wood'	kāṭh-e kāṭh-o *kāṭh-e *kāṭh-o	'only wood' 'even wood'
bhāt	'rice'	bhāt-e bhāt-o *bhat-e *bhat-o	'only rice' 'even rice'
ācār	'pickle'	ācār-e ācār-o *ācar-e *ācar-o *ācr-e *ācr-o	'only pickle' 'even pickle'
cāur	'rice'	cāur-e cāur-o *caur-e *caur-o	'only rice' 'even rice'

Reference

Zwicky, A.M. & G.K. Pullum 1983. "Cliticization vs. inflection: English n't," *Language* 59:3, 502-513.

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GRAPHIC AND CLASSIFIER VERB BASES IN THE NEWAR LANGUAGE

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Introduction

According to the definition of a classifier language set out by Joseph Greenberg (1972), Newar can be described as a classifier language. It has several types of distinct numeral classifiers.

The classifier and quantifier (or graphic) morphemes in Newar are found in various syntactic situations throughout the language. The role of these morphemes in the formation of verb bases is the subject of this paper.

Verb bases derived from classifier and quantifier (graphic) morphemes are widely used in both colloquial and written Newar. Verb bases formed from both types of morphemes can essentially be viewed as nominal in nature.

In the Newar language true nominal verbs are derived from adjectives. The verb bases derived from classifier and quantifier morphemes can be treated as subgroup to the true nominal verbs derived from adjectives. Both nominal verbs and verb bases are impersonal. The true nominal verbs are always paradigmatically irregular & causative form in whereas the verb bases derived from classifier and quantifier morphemes are always paradigmatically & causative forms.

K forms of true nominal verb are always paradigmatically irregular. Examples are:

Non-causative

phākula. (It) became pungent.
cākula. (It) became sweet.
pāula. (It) became sour.
wacula. (It) became blue
wāula. (It) became green.
hyāula. (It) became red.
khiula. (It) became dark.
mhāsula. (It) became yellow.

Causative

phākukala. (One) made (it) pungent
cākukala. (One) made (it) sweet.
pāukala. (One) made (it) sour.
wacukala. (One) made (it) blue.
wāukala. (One) made (it) green.
hyāukala. (One) made (it) red.
khiukala. (One) made (it) dark.
mhāsukala. (One) made (it) yellow.

gloss	Verb	pd.	pc.	imp.	k.
To inform	kan-e	kana	kana	kā	kāak-e
To take	kā-ye	kala	kayā	kā	kāek-e
To be pressed	kā-ye	kāta	kānā	x	kāk-e
To scramble	kāl-e	kāla	kalā	kā	kāek-e
To request	kwap-e	kwapala	kwapā	kwapiu	kwapak-e
To rebuke	hakk-e	hakkala	hakkā	hakki	x

Nominal verbs: The nominal verbs are the ones derived from adjectives and graphic or classifier morphemes. They are always impersonal. The following examples are derived from adjectives:

gloss	adjective	v. form	meaning	K
sweet	cāku	cākula	(It) became sweet.	cākukala
sweet	māku	mākula	(It) became sweet.	mākukala
sour	pāu	pāula	(It) became sour.	pāukala
green	wāu	waula	(It) became green.	waukala
blue	wācu	wācula	(It) became blue.	wācukala
red	hyāu	hyāula	(It) became red.	hyāukala
yellow	mhāsu	mhāusla	(It) became yellow.	mhāsukala
black	hāku	hākula	(It) became black.	hākukala
white	tuyu	tuyula ⁷	(It) became white.	tuyukala
light	yāu	yāula	(It) became light.	yāukala
thin	sālu	sālula	(It) became thin.	sālukala
thick	khwātu	khwatula	(It) became thick	khwatukala
rough	kwācu	kwācula	(It) became rough	kwācukala
slippy	culu	culula	(It) became slippery	culukala
clean	yecu	yecula	(It) became clean	yecukala
heavy	jhyātu	jhyatula	(It) became heavy	jhyatukala
smooti	picu	picula	(It) became smooth	piculala
greasy	thyācu	thyācula	(It) became greasy	thyācukala

Verb Bases

The nominal verb has two semantically similar and characteristically correlative sub-sets, i.e. verb bases, which have a wide range of colloquial and written uses. These are:

Graphic Verb Base: It gives a clear, effective, view of size, height, length, breadth, things.

Classifier Verb Base: It gives a clear, effective, view of shape, size, figure, things.

Each of these verb bases has two sub-sets. The sub-set for the graphic verb base may be set out as follows:

Simple Graphic Verb Base: The quantifier morpheme plus a morpheme representing a graphic feature of height, length or breadth may be formed as a simple graphic verb base. The quantifier morpheme may be treated as a verbal prefix and morpheme for the graphic feature may be treated as a stem verb and it can be conjugated as a root verb ending with /y/. In the similar way K form may also be formed, e.g.:

qni. + gm.	gloss.	V.form ⁸	meaning	K
ta + jāā	height	tajāla	(It) became higher	tajaekala
ci + hāā	length	cihāla	(It) became shorter	cihaekala
ta + byā	breadth	tabyāta	(It) became wider	tabyakala
ci + dhikaa	hight	cidhikala	(It) became shorter	cidhikaekala
ta + kuu	size	takula	(It) became bigger	takuikala

Complex Graphic Verb Base: The complex graphic verb base may be formed with the help of a morpheme representing the graphic feature of height, length or breadth. The postpositional **pae** is preceded by a pronominal particle **a-**, **āma-**, **ga-**, **tha-**, **hūy-**, and followed by a morpheme representing the graphic feature. This morpheme for graphic is then a verb base which can be conjugated as a morphophonemically /y/ ending verb root. The postpositional **pae**, which denotes 'like', and pronominal morphemes (**a-**, **āma-**, **ga-**, **tha-**, or **hūy-**) are also treated as verb prefixes.

The formation of the complex graphic verb base can be set out as follows:

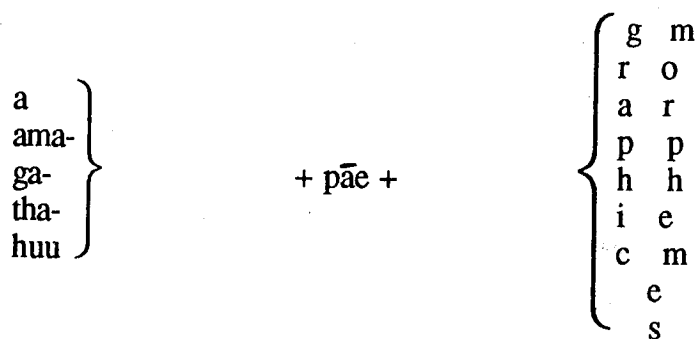


Fig. 2

kāe huy-pāe dhikala. The son became that tall (i.e. tall like that).
 paakhāa a pae jāla. The wall became that high (i.e. high like that).
 paā āmapāe hala. The bamboo became that long (i.e. long like that).
 che gapāe jala? How high did the house become. (i.e. like what)
 kāpaa thapāe byāta. The cloth became this wide (i.e. wide like this).

The sub-set for the classifier verb base may be set out as follows:

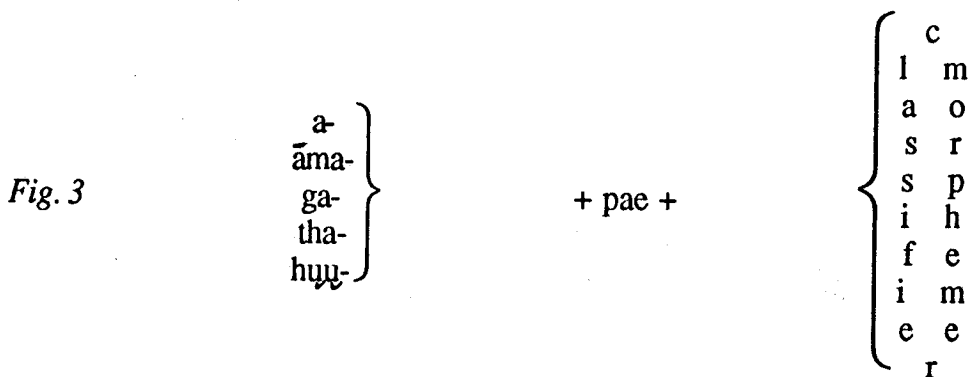
Simple Classifier Verb Base: The quantifier morpheme plus a classifier morpheme may be formed as a classifier verb base. The quantifier morpheme may be treated as a verbal prefix, and the morpheme for classifier may be treated as a stem verb that can be conjugated as a root verb ending with /y/. Similarly, the K form can also be formed. A head noun of the class defined by the classifier morpheme must always be the subject, for example:

che takhāta. A house became large.
 kathi cipula. A stick became thin.
 swāā taphwala. A flower became large.
 laa cipāta. Clothes became small.
 jāsi tagwala. A rice cooking pot became large.

Complex Classifier Verb Base:

The complex classifier verb base can be formed in exactly the same way in which the complex graphic verb base has formed, only it needs the replacement of the graphic morpheme by the classifier.

The formation of the complex classifier verb base can be set out as follows:



che apāe khāta. A house became that big (or small).
 aa āmapāe gwala. A mango became that big (or small).
 che gapāe khāta? How big did the house become?
 mari thapāe pāta. A bread became this big (or small).
 tu huy pāe pula. A sugarcane became that like big (or small).
 swāā apae phwala. A flower became that large (or small).

It should be further added that the pronominal morpheme can be replaced by a noun which has represented (semantically) a distinct shape or particular figure. When this representation occurs a new pattern is formed for both graphic and classifier complex verb bases. Examples are:

complex graphic verb base

paakhāā chepae jala. A wall became as high as a house.

janii gapāe byāta. A girdle became as wide as a shawl.

sa mhadhu pāe hala. A hair became as long as a body.

complex classifier verb base

mari hāsāpāe pāta. A pastry became as large as winnowing tray.

gulaph swāā taphwaaswāā pāe phwala. The rose became as large as a marigold.

mikhā bakhuykhee pāe gwala. The eyes became as large as a pigeon's egg.

The post positional '-pāe-' morpheme may also add the diminutive '-ca' suffix. The combination of '-pāe-' and '-cā' makes three semantic forms:

1) -pāecā,

(2) -picā

(3) -pcā

Each of them denotes 'only this (or that) like', 'merely this (or that) like'. for example:

wa aagaa tha $\left\{ \begin{array}{l} -pāecā \\ -picā \\ -pcā \end{array} \right\}$ jāla. That wall became only this high (or low).

chaagu che a $\left\{ \begin{array}{l} -pāecā \\ -picā \\ -pcā \end{array} \right\}$ khāta. Your house became only that large (or small).

la gwaa āma $\left\{ \begin{array}{l} -pāecā \\ -picā \\ -pcā \end{array} \right\}$ gwala. A meat ball became only that big (or small).

taphwaa swāā ga $\left\{ \begin{array}{l} -pāecā \\ -picā \\ -pcā \end{array} \right\}$ phwala? How small (or big) did a marigold become?

maaya sikhaa huu $\left\{ \begin{array}{l} -pāecā \\ -picā \\ -pcā \end{array} \right\}$ pula. A chain became only that small (or big).

'baacā' denoting 'middling or minimal' may also be added to the postpositional '-pāe' morpheme exactly in the same way, e.g.:

che baacāpāe jāla. A house became slightly high (i.e. not so large and not so small).¹⁰

swāṃ baacāpāe phwala. A flower became slightly large (i.e. not so large and not so small).

wayā kāe baacāpāe dhikala. His son became slightly tall (i.e. not so tall and not so short).

āmāsi baacāpāe gwala. A guava became slightly large (i.e. not so large and not so small)

lā baacāpāe byāta. A path became slightly wide (i.e. not so wide and not so narrow).

tu baacāpāe pula. A sugarcane became slightly large (i.e. not so large and not so small)

gulāph swāṃ baacāpāe phwala. The rose became slightly large (i.e. not so large and not so small).

In a similar way, two semantic variations from quantifier morphemes (ta- and ci-) can be formed by lengthening or intoning the final vowel (ta- into taa- and ci- into cii-) to emphasize the meaning semantically, and for giving semantic dimensions to both (ta- and ci) quantifiers by replacing 'bharāe' and 'sasipāe' with the meaning reciprocally gigantic and tiny. Then we have three semantic categories for both quantifier morphemes, which vary and emphasize the meaning to the same extent. These may be listed as follows:

ta-/	taa-/	bharāe/
ci/	cii-/	sasipāe/

All of them can be used for both simple graphic and simple classifier verb bases.

Examples for graphic verb base:

chē tajāla. A house became high.¹⁰

chē taajāla. A house became (a bit more) high.

chē bharaejala. A house became (too) high.

bhāātāālaa cihala. A skirt became short.

bhāātāālaa ciihala. A skirt became (a bit more) short.

bhāātāālaa sasipaehal. A skirt became (too) short.

Example for classifier verb base:

chē takhāta. A house became big.

chē taakhāta. A house became (a bit more) big.

chē bharāekhāta. A house became huge.

lā ci pāta. A vesture became small.

lā cii pāta. A vesture became smaller.

lā sasi pāe pāta. A vesture became too small.

āmāsi ci gwala. A guava became small.

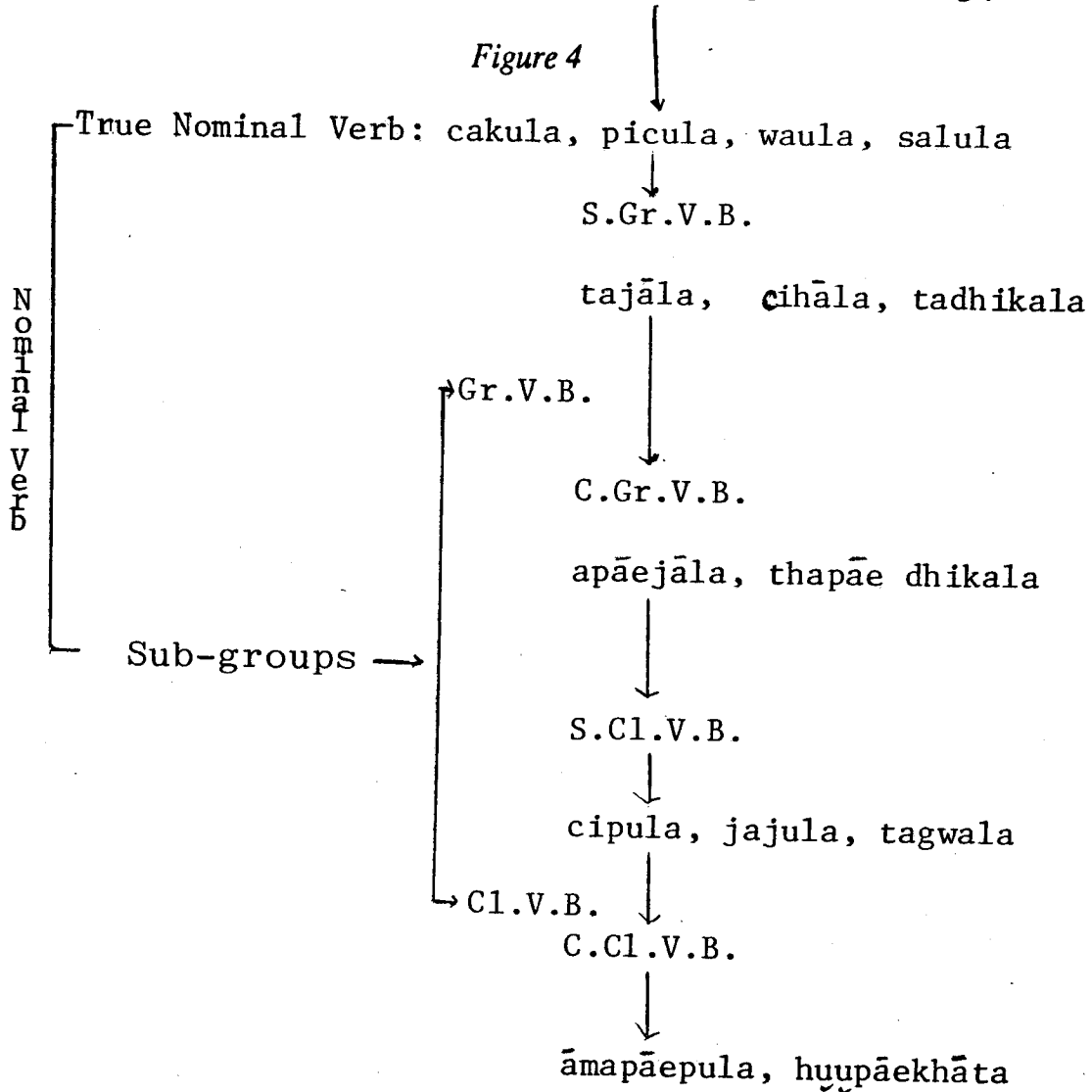
āmāsi cii gwala. A guava became smaller.

āmāsi sasi pae gwala. A guava became too small.

Verb Diagram

Root Verb (It has morphophonemically /n/, /y/, /l/, /p/, /t/, /k/ endings).

Figure 4



APPENDIXES

Relating to the verb bases

Appendix A. The role of classifiers in forming the verb base.

There are four kinds of principal classifiers in Newar. These can be set out according to the following criteria:

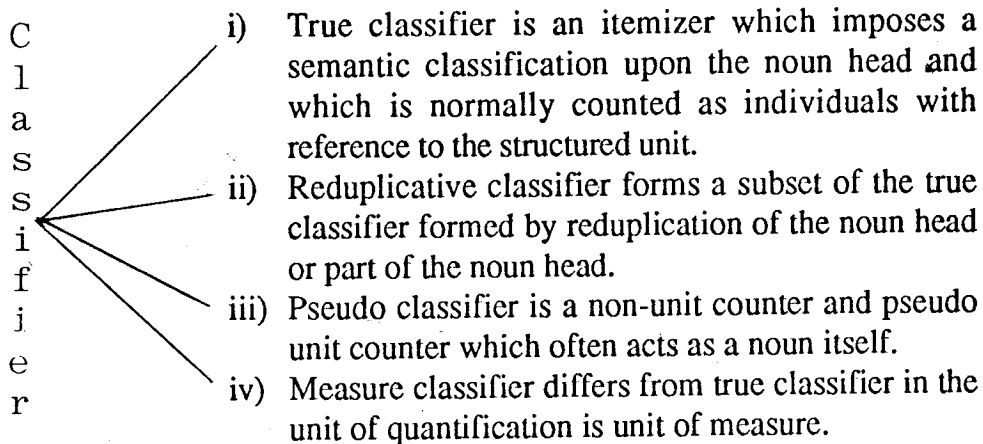


Figure 5

Apart from true classifier each of these has many sub-classes. Only those classifiers from which verb bases can be formed will be discussed and listed in their verb forms with K form:

(a) From the true classifier.

gwaa. cl. for round object, container and house parts.

phasi ta gwala. A pumpkin became big. K. gwaekala

pā. cl. for flat object, and paired object.

mari tapāta. A bread became large. K. pakala.

pu, cl. for long thin object.

wayā lhāā tapula. His hand became fat. K. pukala. (Irr.)

phwaa. cl. for flower. floral object.

gulāph swāā ciphwala. The rose became small. K. phwaekala.

cāā. cl. for circular object.

ghaacāā tacāla. A wheel became large. K. caekala.

khā. cl. for house (unique).

chaagu che cikhata. Your house became small. K. khakala.

pāā. cl. for shirt, skirt, and coat. (unique).

macāyāta laa tapata. A vesture became large for a child. K. pakala.

pwāā. cl. for lamp, light (unique).

mata tapwāta. A lamp became bright. K. pwakala.

(b) From the reduplicative classifier.

pwaa. cl for package, swelling (of a body part).

wasaa pwaa ta pwala. A package of clothes became large. K. pwaekala.

kii, cl. for a nail. peg.

pyākii takina. A staple became big. K. kiikala.

hwaa. cl for hole.

sāsaa hwaa cihwala, The larynx (wind pipe) became small. K. hwaekala.

pwāā. cl for hole.

bhau pwāā tapwāta. A cat-hole became large. K. pwakala.

duwāā. cl for gate,

cheyāta lukhā-duwāā ciduwāta. A gate became small for (that) building. K. duwāekala (irr).

patii, cl for a finger.

aaguupatii cipatina. The ring-finger became small. K. patiikala.

haa. cl. for leaf.

palehaa cihala. A petal of lotus became small. K. haekala.

kawaa. cl. for column spacing between two pillars.

pasaa kawaa ci kawala. A column spacing of a shop K. kawaekala became smaller.

(c) From the pseudo classifier.

ju. cl. for paired object.

lakāā tajula. A pair of shoes became large. K. jukala. (irr.)

jwāā. cl. for a set of 108 standing lamps.

dewa tajwala. A set of 108 butter lamps became large. K. jwekala.

jwaa. cl. for paired or grouped object.

pujyābhaa cijwala. A set of plate for worship became small. K. jwaekala.

The following are the sub-groups of pseudo classifier:

i. Approximate arrangement.

ku. cl for a load.

jāki takula. A load of rice became large. K. kukala. (irr)

thu. cl for bundle.

tukāā cithuta. A bundle of mustard plant became small. K. thunkala.

jhwaa. cl for a line, a row, queue.

bhwaē tajhwala. The line for a feast became longer. K. jhwaekala

dhwaa. cl for a line, stripe.

kāpatae hyāy tadhwa. The red stripe in the cloth became wider. K. dhaekala.
mhuu. cl for a bundle.

pasalae tarkāricimhula. A bundle of vegetable in the shop became small. K. mhuikala.

ii) Approximate volume.

bhwāā. cl for flat palmful morsel.

macōyāta baji tabhwāta. For the child, a heaped handful beaten rice became more than enough. K. bhwākala.

pee. cl for fingerful morsel.

jītaā jā tapela. For me the morsel of fingerful of cooked rice became large. K. peekala.

bekyū. cl for armful load or package.

wasaa tabekuna. The armful of clothes became big. K. bekyūkala.

iii) Approximate size

kawaa. cl. for column spacing (between two poles, pillars)

pasaa ta kawala. The column spacing of a shop became large. K. kawekala

phwaa. cl for flower, floral object

swāā taphwala. The size of a flower became large. K. phwaekala.

iv) Shape (a discribed entity)

gwāā. cl for a log.

si tagwala. A log became large. K. gwaekala.

tā. cl. for a piece of bread.

mari tatāta. The bread became large. K. takala.

thuu. cl for rolled item.

sukuu tathula. A roll of mat became large. K. thukala. (irr)

v) Shape (simple proximity)

dwa. cl for heap

cā tadwala. The heap of earth became large. K. dwaekala

pucaa. cl for a group.

pujyābhalae jāki tapucal. An amount of rice in the Puja plate became K. pucaekala.

vi) Integral part

gājaa. cl for cluster, bouquet.

swāāmā tagajala. A flower plant became tufty. K. gājaekala.

thwāā. cl for head of Cauli flower.

kaule ta thwata. The head of cauliflower became large. K. thwākala.

vii) Bounded Item

kūu. cl for wound, dried wound; piece, cut piece.
ghāā takula. A wound became large. K. kukala.

Appendix B. Reduplicative uses.

i) Reduplication of quantifier morphemes.

For both verb bases, quantifier morphemes *ta-* and *bharae-*, *ci-* and *sasipāe* may be reduplicated. This reduplication may denote semantically the individuality of the items. e.g.:

saatrāsi cicigwaa. The oranges have grown small (Each orange is small; they are small individually).

saatrāsi tatagwala. The oranges have grown large (individually).

ukii ukii bharāe bharāe gwagu lya: So, choose the biggest (huge) ones among them

tī tatahāā. The reeds are long (each reed is long; they are long individually).

jhiita cicihāāgu māā. We need short ones.

ukii ukii sasipāe sasipaehaagu leya kae nu. So, let us choose the shortest ones among them.

ii) Reduplication of pronominal morphemes.

There may be reduplicated pronominal morphemes '*a-*' '*āma-*', '*ga-*', '*tha-*' '*huy-*' or postpositional *-pae-* in exactly the same manner. Each of them occur separately or together, e.g.:

kathi { āma āma pāe
āma pāe pāe
āma pāe āma pāe } hāla. The stick became that long. K. hāekala.

che { tha tha pāe
tha pāe pāe
tha pāe tha pāe } khata. A house was built this big K. khakala.

pāsi { ga ga pāe
ga pāe pāe
ga pāe ga pāe } gwala? How big did become pears? K. gwaekala.

khicā { huy huy pāe
huy pāe pāe
huy pāe huy pāe } dhikal. The dogs had become that big. K. dhikaekala.

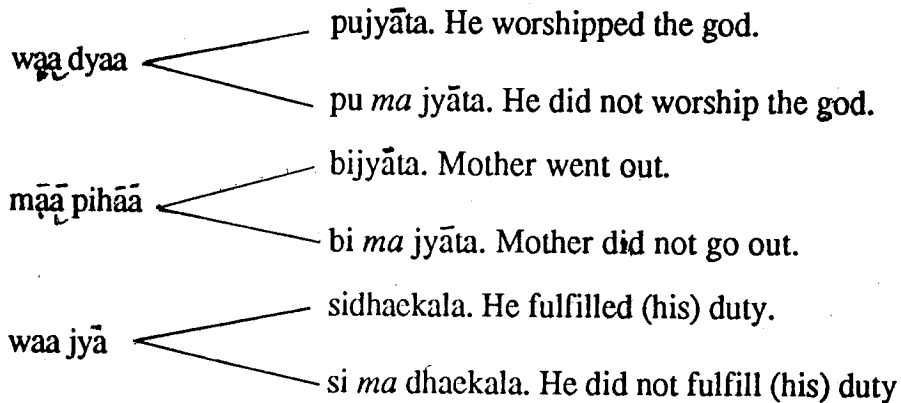
paakhāā { a a pāe
a pāe pāe
a pāe a pāe } jala. The wall became that high. K. jāekala.

Appendix C

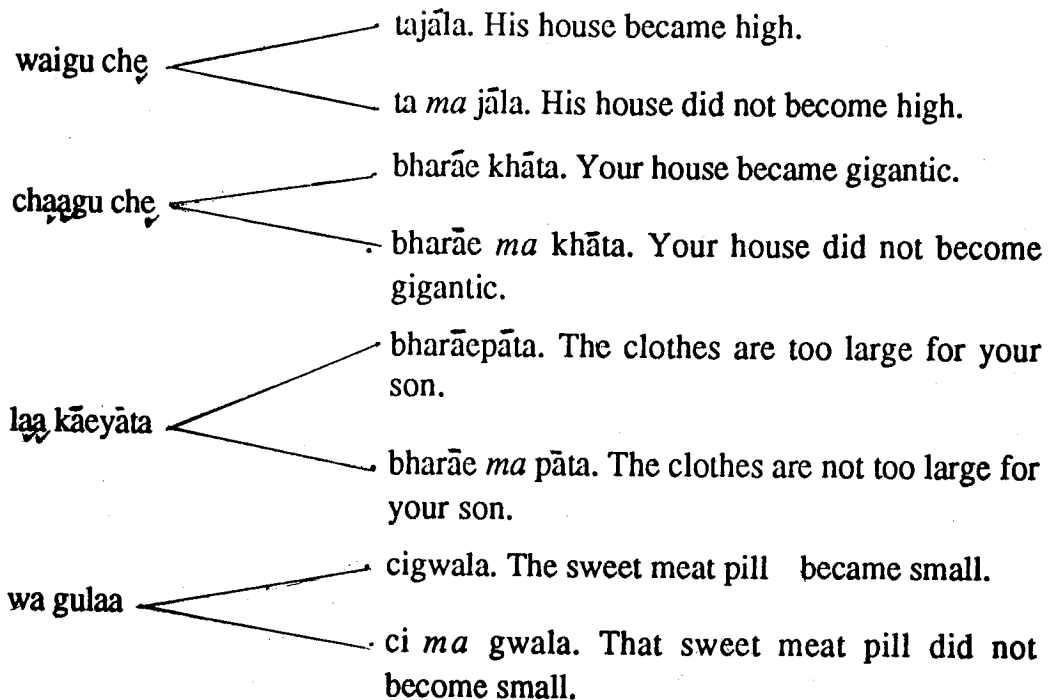
Generic Negation

The generic negation *ma* morpheme is always inserted between the prefix and the root verb in Newar. So the negation *ma* discriminates the verbal prefix and the root verb.

The following are examples of insertion



Similarly the morphemes which are treated as verbal prefixes can also be distinguished from the graphic and classifier verb base by insertion of the generic negation *ma* morpheme, e.g.:



nhāe pwālaacā	pāepula. (His) nose became as big as gourd.
	pāe <i>ma</i> pula. (His) nose did not become as big as gourd.
gulāph lakhaeswāā	pāephwala. That rose was as large as daisy.
	pāe <i>ma</i> phwala. That rose did not become as large as daisy.

Appendix D.

Causative K

For almost all verbs, *K* is the causative marker in Newari. (i.e. excluding the non-causative *K* ending root verbs). This occurs with both the graphic and classifier verb bases. e.g.:

Non-causative	Causative
wayā chẹ tajāla, His house became high.	wāa chẹ tajāekala, He made (his) house high.
takuswāā taphwala. The rhododendron became large.	wāa takuswāā taphwaekala. He made the rhododendron large.
lạ cibyāta. A path became narrow.	imisāa lạ cibyakala. They made a path narrower.
waita lạa tapāta. A shirt became larger for him.	wāa jitta lạa tapāekala. He made a shirt larger for me.
khicā cidhikala. A dog became small.	wāa khicā cidhikaekala. He made a dog smaller.
caạ cidhana, A swivel became small.	barejuu caạ ci dhaakala. Bare made a swivel smaller.

Appendix E. Pronominal morphemes.

The pronominal morpheme *a* is the syncopal form of the demonstrative pronoun *wa*, 'that'. The morpheme *tha* is the syncopal form of demonstrative *thwa*, 'this'. In Newar there are four demonstrative pronouns, while in other languages such as Japanese, there are often fewer (with Japanese equivalents):-

- 1) **thwa** this (if the object is close to speaker), the Japanese equivalent is *kore*.
- 2) **āma** that (if the object is very close to the hearer), (the Japanese equivalent is *sore*.)

- 3) **hɣɣ** that (if the object as far away from both the speaker and hearer),
- 4) **wa** that

References

- Weidert, Alfons K. 1984, "The Classifier Construction of Newari and its Historical Southeast Asian Background" *Kailash, Volume XI*.
- Hale Austin and Iswaranand Shresthacharya, 1973, "Is Newar a Classifier Language?" *Contribution to Nepalese Studies*, Vol. 1. No 1, pp. 1-21.
- Greenberg, Josheph H., 1972, *Numeral Classifiers substantival numeral: Problems in the genesis of a linguistic Type*.
- Shresthacharya, Iswaranand, 1981 *Newar Root Verbs*. Kathmandu: Ratna Pustak Bhandar.
- Shresthacharya, Iswaranand, and Nirmal Man Tuladhar, 1976 *Jyapu Vocabulary* (Preriminary Report). Kathmandu: INAS/TU.
- Shresthacharya, Iswaranand, Jagan Nath Maskey and Hale Austin, 1971, *Conversational Newari*. Kathmandu: SIL/TU.

COMPOUND VERBS IN NEPALI

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1. Introduction

Compound Verb (CV) is an areal feature of South Asia, the highlands of the Altai, and the Kirghiz, China, Korea, Japan, Turkey, Central Iran and major parts of East Asia (Masica 1976). From the Indo-European angle the languages of this macro area are not rich in inflections, specifically the verbal inflections. The languages spoken originally in South Asia are Dravidian, Austroasiatic and Sino-Tibetan which are agglutinative in character. Indo-European was richer in Aspect than in Tense-system. Hence to give various minute aspectual shades of meanings morphological complex was used in Sanskrit, Greek (Banerjee 1983) and Latin (Buck 1937). Agglutination or serialization is the only process predominant in East and South-East Asia for the same aspectual and modal functions which are accomplished by Indo-European verbal affixes (Chatterji 1926:1050). When speakers of Indo-European came in contact with the speakers of Dravidian, Austroasiatic and Sino-Tibetan the process of serialization may have diffused into Sanskrit as a substratum. CV's are not found in Ancient Greek, Latin, Ancient Iranian (Caldwell *et al* 1961: 448) and Rgveda (Sen 1968). Writers like Sen (1968), Sen-Gupta (1974) and Katre (1976) give the evidence of gradual increase in such constructions (Fig. 1) in Indo-Aryan from the *Rgveda* along *Atharvaveda*, *SatapathabrAhmaNa*, *Raghuvamsa*, *PAlI*, *Prakrt*, *AvahaTTha* and New Indo-Aryan languages like Gujarati, Bangali and Marathi. An early trace of CV is attested in Nepali in the 14th century inscriptions (Pokharel 1985).

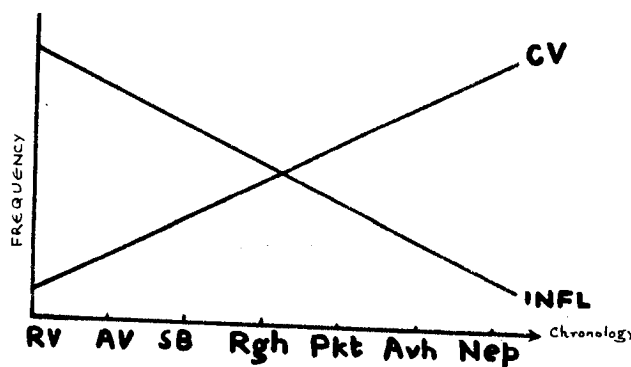


Fig. 1. Gradual decrease in inflections and corresponding increase in CV in Indo-Aryan

CV's are found in all the language families in South Asia like Dravidian (Emeneau 1956, Caldwell *et al* 1961, Krishnamurti 1968, Masica 1976, 1991 and Zograph 1982), Austroasiatic (Zide 1966), Sino-Tibetan and Indo-Aryan

The first trace of CV's in Indo-Aryan was found in North-West among the languages which are 'associated with the *PisAca* group' (Katre 1976). In this light scholars are of the view that "CV in Indo-Aryan originated as a result of an areal pressure exerted by other language families in the Asian region" (Singh *et al* 1986). But Hook (1977) changes his own hypothesis (Hook 1974) and thinks CV's to be completely independent innovation of Indo-Aryan on the basis of statistical observation where he finds the following scale:

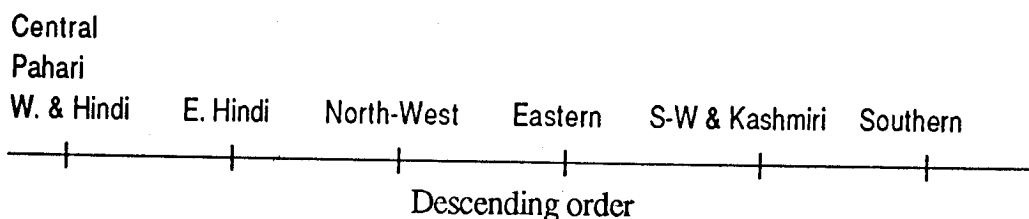


Fig. 2. Frequency of CV in IA

But in any case the motivation for this innovation seems to be the structure and models of pan-Indic and East-Asian phenomenon, because Masica (1976) notes similar inventories of Vectors across languages of the mentioned large area. His observation may lead us to think of Universals in the semantic transparency of Vectors (Provided that a language has CV).

In the light of this perspective we are motivated to guess the gradual loss of affixes in the verbal spectrum of Indo-Aryan compensated by the gradual increase in the serialization of non-finite verbal stems to denote the same and similar functions and CV's seem to be a result of that process.

2. CHARACTERISTICS OF CV

2.1. Structure

2.1.1. Polarity of Semantics & Grammaticality

Compound Verb is a constellation of a single VP where more than one 'non-finite verbal participles' (Hock 1988) followed by AUX are dominated by a single V-node; usually the first participle of which (Pole) is the semantic head and AUX, the ultimate verbal element of the string is the grammatical head, viz.

$$\begin{array}{ccccccc}
 1. & CV \rightarrow & V_1 + V_2 + \dots + V_{n-2} + V_{n-1} + V_n & & & & \\
 & & [Pole] & \leftarrow \text{Vectors} \rightarrow & & [AUX] & \\
 & & \text{Semantic Head} & & & & \text{Grammatical Head}
 \end{array}$$

The string of CV shows a grammatical hierarchy from left to right and semantic hierarchy from right to left. The items $V_2 + V_3 + \dots + V_{n-1}$ which fall between V_1 and AUX are each called Vectors (Bahl 1967, Hook 1974; Dasgupta 1977, Bhat 1979). Various names are given to Vectors, viz. 'Operators' (Burton-Page 1957), 'Auxiliary Verbs' (Agesthialingom 1972, Sharma 1980), 'Compound Verbs' (Hook 1974, Southworth 1974), 'Secondary Verbs' (Subbarao 1979), 'Extended Verbs' (Annamalai 1982), etc. Dasgupta (1977a) calls V_1 Pole.

This definition of a CV presupposes a Vector to be less meaningful than V_1 and more meaningful than AUX on the one hand and less grammatical than AUX and more grammatical than V_1 on the other. Such a generalization about CV comes under our proposal (Pokharel 1989) that Nepali is a Head-right language. The structure of CV's leads us to modify this proposal as: "Nepali is a grammatically Head-right and semantically Head-left language" (cf. Masica 1976: 13-39). This motivates us to conclude that the suffix of the AUX is the ultimate grammatical Head and the root its complement. Hence there is found successive left-ward complementation. Such an idea implies the structure of a CV to be a sequence of full lexical meaning of V_1 on the left to the progressively leaching of the lexical meaning of Vectors followed by complete leaching of the lexical meaning of the suffix of AUX (see Porizka 1967, 1977, 1979; Sarkar 1976, Dasgupta 1977 (a,b), Annamalai 1979, 1982; Subbarao 1979, Subrahmanyam 1979, Dasgupta *et al* 1981, and Hasson 1985).

2.1.2. Permutation of Pole and Vector

In Hindi permutation of Pole and Vector (Hook 1974) is possible:

2	A.	mAr	diyA	B.	de	mArA
		Pole	Vector		Vector	Pole

Such a permutation in Nepali cannot bring the Vector to the initial position

3 A. di-i chAdyo
(Pole + Vector)

B. chAD-i di-yo
(Pole + Vector)

In each case the Pole-Vector sequence is maintained; simply Polehood and Vectorhood of Verbs are reversed.

2.1.3 Permutation of Vectors

The sequence of Vectors ($V_2 + V_3 + \dots + V_{n-1}$) in Nepali can undergo permutation:

4. khAi - dii - saki - hAlne - gamu -
1 2 3 4 5
(Pole)
pari - raheko - huna - sak - cha
6 7 8 9 10 (Aux)

5. khai - saki - dii - hAlne - cha
(Pole) 3 2 4

6. A. khAi - dii - saki - hAl - yo
(Pole) 2 3 4 (Aux)
B. khAi - saki - dii - hAl - yo
(Pole) 3 2 4 (Aux)
C. khAi - hAl - dii - sak - yo
(Pole) 4 2 3 (Aux)
D. khAi - hAl - saki - di - yo
(Pole) 4 3 2 (Aux)

Such permutations result in different shades of meaning comparable to the change in meaning due to Topicalization and stylistic permutation in that each consecutive item modifies the meaning of the preceding stem.

2.1.4 Number of Vectors in a String

Example (4) shows that in a Nepali idealized S-bar the maximum number of verbs dominated by V and governed by [NP,S] is ten out of which V1 is the Pole, V_n is the AUX and $V_2 + V_3 + \dots + V_{n-1}$ is a sequence of Vectors. Figs. (3 and 4) show that Tamil, Marathi (Dasgupta *et al* 1981), Hindi (Arora 1979) and Kannada (Bhat 1979) have two-member compounding, Bangla has three-member compounding; Loloish, a Sino-Tibetan language has five-member compounding of verbs (Matisoff 1985):

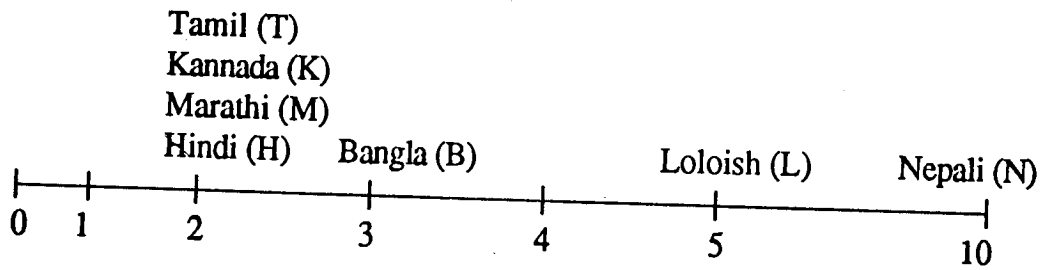


Fig. 3. Number of Participles in CV

This scale shows that the valency of Vectors increases towards East.

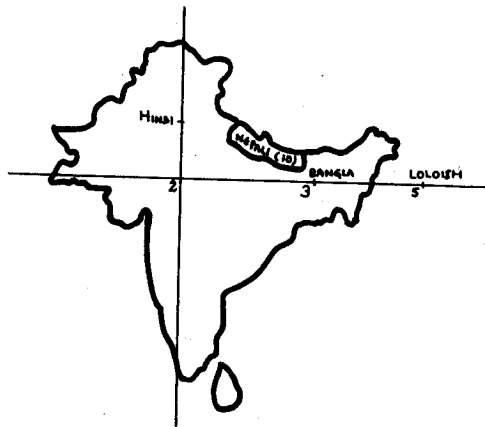


Fig. 4. Number of Roots in CV

Since Nepali sentence is idealized a wider statistical observation is necessary before coming to conclusion. Even within Nepal the number of roots in a single string in Newari is only four (Malla: Personal communication).

2.1.5 Leaching of Meaning

The more a verb moves towards right from its initial position V_1 the more there is leaching in the original lexical meaning (of Hasson 1985), and the more abstract meaning is superimposed on the preceding stem. Even in case of Copula this rule holds good.

7. A. keTo ghar-mA thi-yo
 1 1 1 1
 boy home-in was
 The boy was at home.
- B. keTo ghar-mA bas-thi-yo
 1 1 1 1 1 1
 boy home-im sit-be-past
 'The boy used to be at home'

It sounds that the movement of a verb from its Pole-position towards right (i.e. towards AUX) is a process of leaching in the lexical meaning and re-colouring with some characteristic metaphorical meaning. Thus *Double Meaning Test* is also one of the characteristic tests of a Vector (cf Annamalai 1979).

Table 1. Double Meaning of Vectors

	ROOT	LEXICAL MEANING	VECTOR MEANING
A.	de	GIVE	'benefactive', 'permissive', 'intensive'
B.	LAg	TOUCH	'help', 'assistance', 'inception'
C.	par	FALL	'obligation', 'chance'
D.	mAg	BEG	'request'
E.	khoj	SEARCH	'attempt', 'desire'
F.	Au	COME	'result', 'reflection' 'perfect continuous'
G.	hAl	PUT	'immediately', 'carelessly putting'
H.	raha	REMAIN	'continuity'
I.	rAkh	KEEP	'continuity' 'carefully putting'
J.	lyAu	BRING	'perfect continuous' (volitional)
K.	gar	DO	'habituality', 'iteration'
L.	pug	REACH	'result', 'completion'
M.	chAD	LEAVE	'determination'
N.	pAr	MAKE	'causativity'
O.	pAu	GET	'opportunity', 'acquisition'
P.	ho	BE	'honorific passive'
Q.	meT	ERASE	'strong determination'

In the above inventory of Vectors there is *Topal* 'pretend' (as a Vector) which has completely lost its original lexical meaning and there are four such Vectors, viz. *sidhyAu* 'finish', *sak* 'finish'/'probability', *Aⁿ* 'inchoative' and *thAl* 'start' which have retained their lexical meaning and still behave syntactically as Vectors (see also Grierson 1916, Turner 1981, Krishnamurti 1968, Dahal 1974, Kachru 1980, Sharma 1980, Hasson 1985 and Verma 1985).

As noted above, Vectors with similar meanings are found being used across language boundaries within and outside South Asia.

2.1.6. Participial Constructions

Five types of participles are used in CV constructions. They are as follows:

- A. Gerundive (nu- type)
- B. Infinitive (na- type)
- C. Durative (dai- type)
- D. Absolutive (i- type)
- E. Prospective (ne- type)

Among these five types of participles the Absolutive (i-type) is most productive. This type is found in Telugu (Krishnamurti 1968, Subbarao 1979), Oriya (Dash 1971), late Sanskrit (Katre 1976), Tamil (Annamalai 1979), Kannada (Bhat 1979) and Hindi (Hook 1974, Shapiro 1974, Arora 1979, Bahuguna 1986) and is most common among languages which have a CV construction. In Nepali this is the only type where four-member concatenation of the same type is permitted and thus has maximum valency. Other types hence do not usually allow more than one specific Vector. This type in Nepali is noted by Turnbull (1887), Grierson (1916), Turner (1931), Clark (1963), Dahal (1974) and Sharma (1980) whereas the Gerundive type is noted only by Turner (1831) and the Infinitive, Prospective and Durative types are mentioned by Turnbull (1887) and Grierson (1916). The Infinitive type is found also in Telugu (Krishnamurti 1968) and Tamil (Annamalai 1979). The Durative type is attested in Telugu (Krishnamurti 1968) and late Sanskrit (Katre 1976) the Gerundire type is noted in Sanskrit (Sen-Gupta 1974; Katre 1976).

2.1.7 Selectional Restrictions

(i) The combination of any one of these five types of participles followed by a Vector is not free. One Vector chooses a specific participle type, while the other one chooses a particular root (see Dahal 1974: 610-4). For example, the Gerundive Participle chooses only *par* and *ho* as Vectors. If Vector *par* is preceded by the Absolutive type the roots of the verb, that is, Pole should be either *Au* or *lAg*. Vector *pug* is usually preceded by the Infinitive type. If it is preceded by the Absolutive type, the root of the verb is always *Au*. Similarly, Vector *meT* is always preceded by *mari* (*mar* + *i*). The following table will give a clear picture of such types of selectional restrictions:

Table 1: Selectional Restrictions of Pole and Vector

Aspectual Vectors (cf. Ekka 1979)						Modal Vectors					
Vectors	Participial types					Vector	Participial types				
	nu	ne	na	i	dai		nu	ne	na	i	dai
hAl				+		de			+	+	
sak				+		Au			+	+	
raha				+	+	chAD				+	
						lAg				+	
rAkh				+		Topal				+	
Au			+	+	+	par	+			+	
lyAu				+	+	meT				+	
gar		+			+	mAg					
jA				+	+	pAr		+			
lAg			+	+		pAu			+	+	
						lAu			+		
thAl			+			ho/bha	+				
A~T			+			sak			+		
pug			+	+		khoj			+		
						jA			+		
Total	0	1	5	9	5		2	1	7	8	0

(ii) **Transitivity Harmony- jA** is a Vector in Nepali which is always preceded by the intransitive Pole:

8. **Intransitive Pole + jA**

tyo	{mari,	hiDi,	uDi,	laDi}	gayo
1	1	1	1	1	1
he	die	walk	fly	fall	jA

9. **Transitive Pole + jA**

tyas-le	*{khAi,	gari,	dek ^{hi} }	gayo
1	1	1	1	1
he-ERG	eat	do	see	jA

Therefore (8) is grammatical, but (9) is ungrammatical.

Dasgupta (1977b) observes *Transitivity Harmony* with Bangla data in that a transitive Pole is followed by only a transitive Vector and an intransitive

Pole is followed by an intransitive Vector. Thus in (8,9) the selectional restriction of *jA* shows Transitivity Harmony in Nepali. This Vector does not have any other competant in this respect.

(iii) **Volitionality:** Only the following Vectors co-occur with Volitional Poles:

- | | | |
|-----|--------------------|---------------------|
| 10. | 1. rAkh (KEEP) | 2. chAD (LEAVE) |
| | 3. lyAu (BRING) | 4. sak (CAPABILITY) |
| | 5. de (GIVE) | 6. mAg (BEG) |
| | 7. lAg (TOUCH) | 8. Au (COME) |
| | 9. Topal (PRETEND) | |

- | | | |
|-----|-------------------|--------------------|
| 11. | [+ VOLITION] | [- VOLITION] |
| | A. (i) gari rAkh | (ii) * nidAi rAkh |
| | B. (ii) gari chAD | (ii) * nidAi chAD |
| | C. (i) gari lyAu | (ii) * nidAi lyAu |
| | D. (i) gari de | (ii) * nidAi de |
| | E. (i) gari mAg | (ii) * nidAi mAg |
| | F. (i) gari lAg | (ii) * nidAi lAg |
| | G. (i) gari Au | (ii) * nidAi Au |
| | H. (i) gari Topal | (ii) * nidAi Topal |

Vector **sak** gives both capability and possibilitative meaning if it is preceded by a volitional verb, however, if it is preceded by a non-volitional verb, it can only give possibilitative meaning after the Infinitive participle.

- | | | | | | |
|-----|----|------|---------|--------|------------------|
| 12. | A. | usle | garna | sakcha | 'he can do' |
| | | 1 | 1 | 1 | |
| | | he | do | sak | |
| | B. | u | nidauna | sakcha | 'he might sleep' |
| | | 1 | 1 | 1 | |
| | | he | sleep | sak | |

(iv) **Progressive Aspect:** Following Porizka (1967-9) Dasgupta (1977b), Verma and Hill (1979) and Bahuguna (1986) are of the view that CV's are essentially perfective. The majority of the Nepali data conform to their observations, however, compound verbs in the following sentences show imperfective-progressive aspect, where suffix *-dai* is a progressive marker:

- | | | | | |
|-----|---------------------|----|------|-------------------|
| 13. | Au ⁿ dai | - | garu | 'Keep on coming!' |
| | 1 | 1 | | |
| | coming | do | | |

14. ahile - samma ma paDhAu~ - dai Aeko chu
 1 1 1 1 1 1
 now - till I teach - ing come am
 'I have been teaching till now'.

15. ma bhan - dai jAnchu,ta~ lekh - tai jA
 1 1 1 1 1 1 1
 I say - ing go you writing go
 'I will dictate and you will write'.

16. u Ai - pugdai cha 'He is just coming'
 1 1 1 1
 he come - reaching is

17. u ciThi lekhi - mAgdai cha
 1 1 1 1 1
 he letter write - begging is
 'He is requesting to write a letter'

18. ma ciyA khai - di~dai chu
 1 1 1 1 1
 I tea eat - giving am
 'I am doing a favour by drinking tea'

19. pAs huna u mari - meTtai cha
 1 1 1 1 1 1
 pass to-be he die - erasing is
 'He is trying his best to pass'

20. u jAna - pau~dai cha
 1 1 1 1
 he to-go getting is
 'He is getting an opportunity to go'

21. u gAi - Topaldai cha
 1 1 1 1
 he sing pretending is
 'He is pretending to sing'

22. u khAna - khojdai cha
 1 1 1 1
 he to-eat searching is
 'He is trying to eat'.

23. u khAna A~Ttai cha
 1 1 1 1
 he to-eat tending is
 'He is about to eat'

In 13, 14, 15 the progressive marker *dai* is suffixed to the Pole and in the rest of the examples from 16 to 23 we have it suffixed to the Vector. The examples also show clearly the progressive meaning. But:

- (a) *chAD*, *hAl*, *raha*, *Au*, *jA* and *lyAu* are not suffixed by *dai* in CV.
 (e) perfect forms of Vector *raha*, *Au*, and *lyAu* (*raheko*, *Aeko*, *lyAeko*) give continuous meaning in CV.

(v) **Restructuring of the Ergative Marker**

Ergative marker *-le* is postposed to the Subject, roughly, if the verb is transitive and is in the perfective aspect:

24. us - le kam gar - yo
 1 1 1 1 1
 he ERG work do - perfective
 'He worked'.
25. u laD - yo 'He fell.'
 1 1 1
 he fall - perfective
26. cAmal bhA~DA - mA par - yo
 1 1 1 1
 rice pot in fall - perfective
 'Rice fell into the pot'.

But in CV the specification of *le* is not determined by the transitivity of either Pole or Vector.

27. u- A - yo
 1 1 1
 he come - perfective
 'He came'.
28. us - le Aunu - par - yo
 1 1 1 1 1
 he - ERG come - fall - perfective
 'He had to come' (cf Hook 1985)

As a Pole neither (27) *Au* 'come' nor (26) *par* 'fall' choose the ergative marker *le*, but when these two are compounded with *par* as a Vector (28), they mutually take the ergative marker. Hence, there is restructuring in the selection of the ergative marker in CV's (cf Arora 1979: 64).

(vi) **Inventory of Vectors:** All the roots of the verb in the verbal string except for the one in the Pole position make closed sets. The more one proceeds from left to right towards AUX-position, there is a gradual decrease in the membership of the consecutive set.

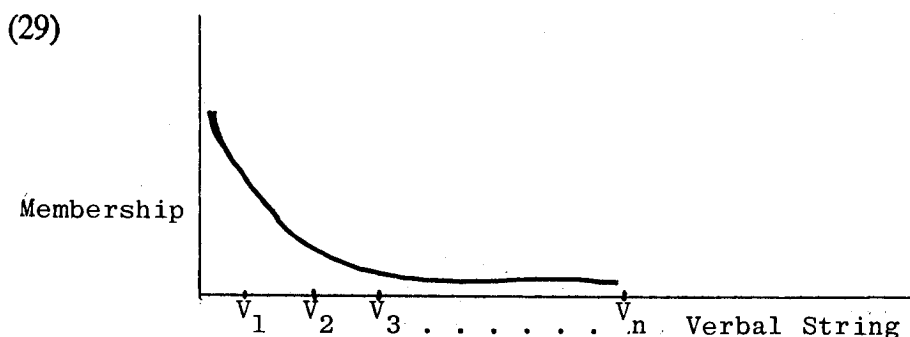


Fig. 5. Set membership of roots

V1 is a Universal Set but each consecutive set is a closed set until we reach Vn (AUX) whose membership in Nepali is two.

The number of Vectors in the South Asian (Indo-Aryan and Dravidion) languages can be represented on a scale where Nepali is on top and Magahi is at the bottom:

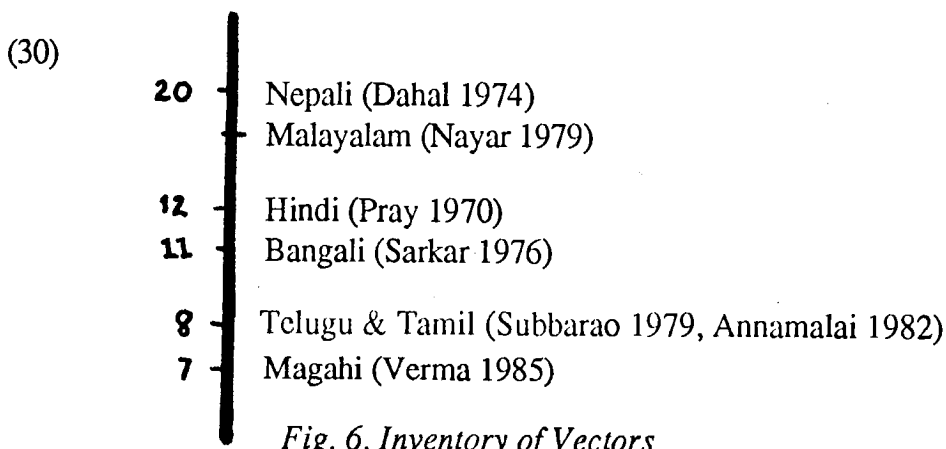


Fig. 6. Inventory of Vectors

The exact number of Vectors in a particular language may vary, but this shows that the number of Vectors in a language is not found to exceed twenty.

2.1.8. Phrase Structure

Dasgupta (1977a)'s and Subbarao (1979)'s structural definition of CV, viz. $V_1 V_2$ AUX is insufficient for Nepali data. We propose the following PS rules: (cf. Arora 1986)

- (31) (A) $V \rightarrow \text{Pole} + \text{AUX}$
- (B) $\text{AUX} \rightarrow \text{Aspect} + \text{Copula}$
- (C) $\text{Aspect} \rightarrow \text{Vector} + \text{Aspectualizer}$
- (D) $\text{Vector} \rightarrow V_2 + V_3 + \dots + V_{n-2}$
- (E) $\text{Aspectualizer} \rightarrow V_{n-1}$
- (F) $\text{Copula} \rightarrow \text{Root} + \text{Infl}$
- (G) $\text{Infl} \rightarrow \{\text{Tense, Gender, Number, Person}\}$

2.2. Verbhood

Verb is a grammatical category of words where morphemes showing contrasts of Tense, Aspect, Voice and Mood are attached. It is the minimal unit in a sentence. Nepali verbs also have husband and wife relation with surface Subject to show agreements of Number, Gender and Person.

32. us - le kAm gari - saki - dii - rAkheko - thiyo
 1 1 1 1 1 1 1 1
 he - ERG work do finish give keep was
 'He had already got the work finished for some one else.'

2.2.1 Pole

With the above definitions, Pole (V_1) is not independently a verb, since there is not any tense-aspect-mood marking morpheme attached to it, but it is the minimal semantic unit of the verbal string.

2.2.2 Vector

Similarly Vectors alone can not be independently considered as verbs, firstly, because they do not have the basic minimal semantic function, secondly because tense-mood-voice-marking morphemes are not directly attached to them. Only to the ultimate Vector the aspect-marking morpheme (*eko*) is attached (32). In this respect the ultimate Vector, is more verb than the Pole. Even within the string of Vectors the initial and medial Vectors contribute to modality. Therefore the initial and medial Vectors are more verbs than the Pole and the ultimate Vector is more verb than the initial and medial Vectors. In order to express modality (shades of meaning) since Vectors lose their basic lexical meaning and are more grammatical than the Pole (see Annamalai 1982), Annamalai (1979) calls these Vectors syntactic Auxiliaries.

2.2.3. AUX

The same definition of verb will make AUX at the top of verbhood, since it expresses the contrasts of tense (Subrahmanyam 1979), mood, voice, number and gender. It also carries the suffix which agrees with the Surface Subject (see Masica 1974 and Steele 1978).

To sum up, the characteristics of Pole, Vector and AUX show that they are complementary to each other and they jointly function as a single verb in an Indo-European language like Sanskrit and Slavic (See Comrie 1976). Thus the following hierarchy of Verbhood:

$$\text{Pole} < \left(\begin{array}{c} \text{Initial \&} \\ \text{Medial} \\ \text{Vectors} \end{array} \right) < \left(\begin{array}{c} \text{Ultimate} \\ \text{Vector} \end{array} \right) < \text{AUX}$$

2.3. Compound Verbs

(i) (A) era-Substitution Test

As defined above, the basic characteristic of a CV is that it should be dominated by a single S-bar or clause (cf Bruce 1988). Therefore a CV can not be split up into as many simple sentences as there are verbal roots.

33. us - le ciThi lekhi - diyo

1 1 1 1 1

he - ERG letter write gave

(A) 'He wrote and handed over the letter'

(B) 'He did a favour of writing the letter'

Thus if (33) is interpreted as (A), then the construction is not a CV, but if it is interpreted as (B) it is a CV. Hook (1974) gives *kar Insertion* and *kar-Deletion Tests* to characterize one of the five types of CV's. If the suffix -i of the first verb can be replaced by *era* (cf 33 and 34) to give the same meaning, the construction is not a CV, and *vice versa*.

34. us-le ciThi lekhera diyo

But these tests are not sufficient criteria to differentiate a CV of a simple sentence and a verbal sequence of complex and compound sentences in Nepali, because they are suited only for the Absolutive construction of a Pole.

The following tests we propose here in addition to *era-Insertion test* to characterize CV's in Nepali.

(B) Not Only - But Also-test

This test is suited for the Durative (*dai*) type of Pole followed by a Vector. If 35 (A) can be paraphrased as 35 (B), then it is not a CV, and if it is

paraphrased as 35(C), it is a CV.

35. A. u nidAu - dai gayo
 1 1 1
 he sleeping went
 B. 'He was *not only* sleeping, *but also* going.
 C. 'He went on sleeping'

(C) Gerundive (nu) type

If 36(A) is paraphrased as 36(B), then it is not a CV, but if it is paraphrased as 36(C), it is a CV.

36. A. keTi nAcnu huncha
 girl dance becomes
 B. 'Dancing of a girl is justified'
 C. 'The girl dances (Honorific)'

(D) Infinitive Type

If the penultimate verb is an answer to 'WHAT?' or 'WHY?', for the ultimate verb, then the verbal sequence is not a CV, and *vice versa*. With this test the majority of the verbs listed as Vectors by Dahal (1974 : 610-4) turn out to be an embedding of two simple sentences except for *pug* and *ja*.

37. A. u marna pugyo
 1 1 1
 he die reached
 B. 'He reached to die'
 C. 'Accidentally he died'
38. A. u mama gayo
 B. 'He went to die'
 C. 'He happened to die'

If 37A and 38A are interpreted as corresponding B's the constructions are not CV's, but if they are interpreted as C's, they are CV's.

(E) Root - Duplication Test

Only this test is suited for the Prospective type. Except for *Topal* which cannot occur as a Pole, Vectors have a characteristic of being preceded by the same root as a Pole.

- | | |
|--------------------|------------------|
| 39. A. parnu paryo | B. lAgnalAgyo |
| C. garne garcha | D. gardai garchu |
| E. hAli hAlyo | F. hunu huncha |

With this criterion 39(C) is also a CV where *gar* is used both as a Pole and a Vector.

(F) Double Negation Test

To prove a CV to be dominated by a single S-bar Dasgupta (1977a) proposes this test (Double X Test). According to Dasgupta (1977a) if a verbal sequence undergoes double negation, it is not a CV, because simultaneous negation of both Pole and Vector is not possible probably because a CV denotes a single idea (Bruce 1988) hence it needs a single negation (see also Annamalai 1979).

- 40 A. us - le ciThi lekhi diyo
 1 1 1 1 1
 he - ERG letter write gave
 B. us - le ciThi nalekhi diena
 1 1
 NEG NEG
 C. us - le ciThi lekhi diena
 D. *us - le cithi nalekhi - diena
 1 1
 NEG NEG

As a CV (40A) does not tolerate double negation (40D), but as a conjunctive participle it may undergo double negation (40B).

(G) Different Subject Test

The proposal of Annamalai (1982) that the constituent verbal units in a CV can not be construed with different Subjects also presumes the fact that a CV is always dominated by single S-bar.

(ii) Operator Deletion Rule

This characteristic rule for CV was proposed by Burton-Page (1957) and was supported by Hacker (1961), Hook (1974), Arora (1979, 1986), Bhatia (1979), Subbarao (1979) and Bahuguna (1986). According to Hacker (1961) "Negative sentences are as a rule construed without explicative operators, since negation normally precludes the idea of definiteness". This test postulates that there is an absorption of Vectors if a CV undergoes negation. But this test fails to characterize CV's in Nepali, because negative CV's are not ungrammatical in Nepali. Dasgupta (1977b) also gives counterexamples from Bangla. It is a general character of negation in South Asian language that there is copula deletion (Bhatia 1979):

41. A. ma bhat khAn - chu 'I eat rice'
 1 1 1 1
 I rice eat - copula
 B. ma bhat khAn - na
 1 1 1 1
 I rice eat - NEG
 'I don't eat rice'

Pragmatically speakers may not chose CV's in negative sentences, but negative CV's are not ungrammatical and are thus available in the data:

42. ma gari - dii - saki - hAl - chu
 1 1 1 1 1 1
 I do - give - finish - put - am
 'I will do'
 43. ma gari - dii - saki - hAldi - na
 44. ma gari - dii - sakti - na
 45. ma gardi - na

It means various contexts may chose any of the negative counterparts (43-46) for the same affirmative sentence (42). They are determined stylistically and pragmatically.

(iii) Adverb - Insertion Test

This test is proposed by Dasgupta (1977a) according to which adverb insertion is not possible between a Pole and a vector. Thus, if there is an insertion, the construction results in a non-compound verb, but this test does not hold good in Nepali:

47. u mari - jA - os!
 1 1 1 1
 he die - go - optative
 'May he die!'
 48. u mari - na - jA - os
 1 1 1 1 1
 he die - NEG - go - optative
 'May he not die!'

However, if the adverbial particle *na* precedes the Pole the resultant is a sequence of two verbs:

49. u na - mari jA - os.
 1 1 1 1 1
 he NEG - die go - optative
 'I wish that he might go without being dead!'

In addition to the noted characteristics there are following claims about the nature of CV's in the literature:

(a) Caustivization of CV's is constrained (Annamalai 1982). This claim does not hold good in Nepali.

50. maile bhAt khAi - dii - hAl - e
 1 1 1 1 1
 I-ERB rice eat - give - put
 'I ate rice

51. us - le malai bhAt kwAi - dii - hAl - yo
 1 1 1 1 1 1 1 1
 he - ERG me rice feed - give - put
 'He fed me rice

(b) Change of Voice in CV in not possible (Bahuguna 1986 : 75-8). This claim does not fit into Nepali data:

52. (A) mai - le bhAt khAi - hal - e-
 1 1 1 1
 I rice eat - put
 'I ate rice immediately'
 (B) bhAt khAi - hAl - i - yo
 1 1 1 1
 rice eat - put -PASSIVISER
 'Rice is already eaten up'

(c) The above examples (4-6) are sufficient counterexamples to Arora (1979)'s claim that a CV cannot be followed by another Vector.

(d) Arora (1979)'s claim that a Vector is always marked for tense is wrong for Nepali. We can only say the ultimate Vector is always marked for aspect and AUX is always marked for tense. His and Subbarao (1979)'s similar claim that a Vector inflects for Number, Gender and Tense also might be true if there is no AUX in the string.

(e) Annamalai (1979)'s claim that 'verbs of the same status do not co-occur with themselves except in reduplication' has counterexamples from

Nepali data, because the string of verbs between the Pole and AUX is made up of verbs of the same status.

(iv) The constellation of verbs in the CV expresses the idea of a single unit (Bruce 1988).

2.4. Functions of Vectors

(a) According to Chatterji (1926) Vectors supply the want of modal and aspectual affixes of Sanskrit in New Indo-Aryan languages. In other words, Vectors 'carry the functions of inflectional suffixes in other languages' (Annamalai 1982)

To support Chatterji's hypotheses Verma and Hill (1979) say that the languages of South Asia like Nepali have morphological devices to derive intransitive - transitive opposition (e.g. *phuTnu* - *phoDnu*; *cyAtnu* - *cyAtinu*). Where there is a gap in the morphological device, these languages use CV's, e.g.

53. (A) chorA - le nuhA - yo
 1 1
 son bathed
- (B) AmA - le chorA - lAi nuhAi - dii
 1 1 • 1
 mother son - Acc bathe - give
 'Mother bathed her son'.

The verb **nuhAunu** 'to bathe' in Nepali does not have any morphological device to derive its transitive counterpart. Hence, according to Verma and Hill (1979) CV - construction is devised and used. Following Verma and Hill we can also deduce why Hindi uses CV in passivization in order to fill the gap. In Nepali there is a passivizing morpheme **-i**, but Hindi lacks such a device. Therefore the passive counterpart (55) of a Nepali active sentence (54) does not use a CV while Hindi passive needs the verb-compounding device (57) to be derived from its active counterpart (56):

54. keTi - le bhAt khAi
 1 1 1 1
 girl - ERG rice ate
 'The girl ate rice'
55. bhAt khA - i - yo
 1 1 1 1
 rice eat - PASSIVISER - PAST
 'Rice was eaten'

56. laDki - ne bhAt khA - yA
 1 1 1 1 1
 girl - ERG rice ate
 'The girl ate rice'

57. bhAt khAyA - gayA
 1 1 1
 rice eat - go
 'Rice was eaten'

For the same reason according to Verma and Hill (1979) the use of CV in morphologically richer languages like Nepali, Sindhi, Gujarati and Marwari is less frequent than in the languages like Hindi where there is found a gap in such a morphological device.

(b) Sen (1968) thinks that CV's are highly polished and more appropriate for ceremonial use.

(c) According to Kachru (1980) Vector aids specific meaning to the Pole.

(d) Vectors also show the opposition of transitivity (Dasgupta 1977b, Verma 1985).

(e) All CV's indicate modality (Verma 1983).

(f) CV's are one of the devices of South Asian languages to mark stativity (Verma 1976, 1979 and 1986).

(g) CV's denote the speaker's emotion (Bahuguna 1996).

(h) CV's also show the polarity of Volitionality.

(i) The same Vector can express difference in modality depending upon the aspects of the Pole, e.g.:

58. mai - le tero kAm gari - die
 1 1 1 1
 I your work do - give
 'I have done your work (beneficial)'

59. mai - le tero miTh-Ai khAi - die
 1 1 1
 I your sweets eat - give
 'I ate up your sweets' (emphatic completion)

(j) Nepali uses CV's to mark honorific (*khanu-hun* - *cha*, *khAi* - *baksyo*)

(k) Perfective - Imperfective polarity of aspect in Nepali is signalled by verb - compounding. Without serialization of Verbs 'imperfective aspect' (Comrie 1976) in Nepali cannot be expressed.

60. keto laD - yo
 1 1 1
 boy fall - PAST
 'The boy fell down' (Perfective)

61. keto laD - thi - yo
 1 1 1 1
 boy fall - was - PAST
 'The boy used to fall down'
 (Imperfective Habitual Past)

3. THEORETICAL ISSUE

(a) CV is not taken care by Chomsky's universals of Government and Binding (Dasgupta *et al* 1981).

(b) Dasgupta (1977a), Subbarao (1979) and Dasgupta *et al* (1981) can not account for four-member - compounding of verbs in Nepali.

References

Agesthialingom, S., 1972, Modality in Tamil. *Proceedings of the Second All India Conference of Linguistics* Delhi, p. 7.

Annamalai, E., 1979, Aspects of aspect in Tamil. *IJDL* 8 : 260-7

_____, 1982, Dynamics of verbal extension in Tamil. *IJDL* 11: 22-66.

Arora, Harbir, 1979, *Aspects of Compound Verbs in Hindi*. M. Litt. dissertation. Delhi University.

_____, 1986, Notes on verbal combinations in Hindi, *Praci Bhasha Vijnan* 13 : 14-32.

Bahuguna, Lalit Mohan, 1986, *Hindi Bangla samyukta kriya*. Agra : Kendriya Hindi Sansthan.

Banerjee, Satya Ranjan, 1983, *Indo-European Tense and Aspect in Greek and Sanskrit*. Calcutta : Sanskrit Book Depot.

Bhat, D.N.S., 1979, Vectors in Kannada. *IJDL* 8 : 300-9.

Bhatia, Tej Kumar, 1979, Negation in South Asian languages. In : Kachru (ed), 1-12.

Bruce, Les, 1988, Serialization: From syntax to lexicon. *Studies in Language* 12.1 : 19-49.

Buck, Carl Darling, 1937, *Comparative Grammar of Greek and Latin*. Chicago: University of Chicago Press.

Burton - Page, J., 1957, Compound and conjunct verbs in Hindi. *Bulletin of School of Oriental and African Studies*. 19 : 469 - 70.

Caldwell, Robert; J.L. Wyatt and T. Ramakrishna Pillai, 1961, *A Comparative Grammar of the Dravidian or South Indian Family of Languages*. Madras: University of Madras.

Chatterji, Suniti Kumar, 1926, *The Origin and Development of the Bengali Language*. Calcutta : Calcutta University Press.

Clark, T.W., 1963, *Introduction to Nepali*. Cambridge: W. Heffer.

Comrie, Bernard, 1976, *Aspect*. Cambridge: CUP.

Dahal, Ballabh Mani, 1974, *A Description of Nepali: Literary and Colloquial*. Ph. D. thesis. Pune: University of Poona.

Dasgupta, Probal, 1977a, The internal grammar of compound verbs in Bangla. *Indian Linguistics* 38:68-85.

_____, 1977b, Review. *The Compound Verb in Hindi* by Peter Edwin Hook. *Indian Linguistics* 38:179-93.

_____, R.V. Dhongde, S. Rajendran, 1981. On Complement verb reparsing in Bangla, Marathi and Tamil. *Indian Linguistics*. 42:39-47.

Dash, G.N., 1971, Structure of verb stem in Oriya. *Indian Linguistics* 32:207-12.

- Ekka, Francis, 1979, Some aspects of Kurux aspect. *IJDL* 8:277-84.
- Emeneau, M.B., 1956, India as a linguistic area. *Language* 32:3-16.
- Grierson, G.A., 1916, *Linguistic Survey of India* 9.4:1-100.
- Hacker, P., 1961, On the problem of a method for treating the compound and conjunct verbs in Hindi. *Bulletin of the School of Oriental and African Studies* 24:548-76.
- Hasson, Inga- Lill, 1985, Verb concatenation in Akka. In: Thurgood *et al* (eds), 287-309.
- Hock, Hans Henrich, 1988, Finiteness in Dravidian. Review: Sanford B. Steever: *The Serial Verb Formation in the Dravidian Languages* (MLBS series in Linguistics IV). Delhi: Motilal Banarasidas, 211-33.
- Hook, Peter Edwin, 1974, *Compound Verb in Hindi*. Ann Arbor: University of Michigan Press.
- _____, 1977, The distribution of compound verb in the languages of North India and the question of its origin *IJDL*, 336-51.
- _____, 1985, Modal verbs of obligation in Kashmiri. *IJDL* 14:263-73.
- Kachru, Braj (ed), 1979, *South Asian Language Analysis I*. Urbana - Campaign: University of Illinois.
- Kachru, Yamuna, 1980, *Aspects of Hindi Grammar*. New Delhi: Manohar Prakashan, 43-76.
- Katre, Sumitra M., 1976, The verb in Old and MIA. *IJDL* 5:205-13.
- Klaiman, M.H., 1986, Semantic parameters and the South Asian linguistic area. In: Krishnamurti (ed), 179-94.
- Krishnamurti, Bh., 1968, Compound verbs in Telugu. *Indian Linguistics* 27:7-17.
- _____, (ed), 1986, *South Asian Language: Structure, Convergence and Diglossia*. Delhi: Motilal Banarasidass.

- Masica, Colin P., 1974, The basic order typology as a definer of an Indian linguistic area. *IJDL* 3: 154-80.
- _____, 1976, *Defining a Linguistic Area South Asia*. Chicago: University of Chicago Press.
- _____, 1991, *The Indo-Aryan Languages*. CUP.
- Matisoff, James A., 1985, General introduction. In: Thurgood *et al* (eds), 16-35.
- Nayar, V.R. Prabodha Chandra, 1979, Aspectual system in Malayalam. *IJDL* 8:289.
- Porizka, V., 1967-9, On the perfective verbal aspect in Hindi. *Archive Orientalni* 35:64-88; 36:233-51; 37:19-47; 345-64. Prague.
- Pray, Bruce R., 1970, *Topics in Hindi-Urdu Grammar*. Berkeley: University of California, 121-59.
- Pokharel, Bal Krishna, 1985, *Pac Saya Varsa*. Kathmandu: Sajha Prakashan.
- Pokharel, Madhav P., 1989, Order of meaningful constituents in Nepali. *Contributions to Nepalese Studies*. Kathmandu: CNAS, 16:83-101.
- Sarkar, Pratibha, 1976, The Bengali Verb. *IJDL* 5:274-97.
- Sen, Sukumar, 1968, Compound verb in Indo-Aryan. *Indian Linguistics* 27:61-5.
- Sen Gupta, Sunil, 1974, 'Action-art' and aspect in Bangali combined verbs. *Praci Bhasha Vijnan*. Calcutta: 1:17-36.
- Shapiro, Michael, 1974, *Aspects of Hindi Abstract Verbal Syntax*. Chicago: University of Chicago Ph.D. thesis. Ann Arbor: University of Michigan.
- Sharma, Taranath, 1980, *The Auxiliaries in Nepali*. Madison: University of Wisconsin.
- Singh, U.N.; K.V. Subbarao and S.K. Bandyopadhyaya 1986, Classification of polar verbs in selected South Asian languages. In: Krishnamurti (ed), 244-69.

Southworth, Franklin C., 1974, Linguistic stratigraphy of North India. *IJDL* 3:201-23.

Steele, Susan, 1978, The category of AUX as a language universal. In: J.H. Greenberg (ed): *Universals of Human Language*, Vol. 3. Word Structure, California: Stanford University Press.

Subbarao, K.V., 1979, Secondary verbs in Telugu. *IJDL* 8:268-76.

Subrahmanyam, P.S., 1979, The Gondi aspectual system. Some preliminary observations *IJDL* 8:285-8.

Thurgood, Graham; James A. Matisoff; David Bradley (ed), 1985. *Linguistics of the Sino-Tibetan Area: The State of Art*. Canberra: Department of Linguistics, Research School of Pacific Studies. The Australian National University.

Turnbull, A., 1887, *A Nepali Grammar and English-Nepali and Nepali-English Vocabulary*. Darjeeling: N.L. Roy.

Turner, Ralph Lilley, 1931, *A Comparative and Etymological Dictionary of the Nepali Language*. London: Kegan Paul, Trench, Trubner.

Verma, M.K., (ed) 1976, *The Notion of Subject and the Data from Nepali*. In: Verma (ed), 270-86.

_____, 1986, Typological aspects of the stative in some Indic languages. Paper delivered at the 30th International Congress of Human Sciences in Asia and North Africa. Mexico City, August 1976, P. 1.

_____, and Edwin C. Hill, 1979, Why do South Asian Languages have the typology that they have? In: Kachru (ed), 125-34.

Verma, Sheela, 1985, *The Structure of the Magahi Verb*. Delhi: Manohar, 46-9.

Zide, Norman H. (ed), 1966, *Studies in Comparative Austrasiatic Linguistics*. London: Mouton, p. 104.

Zograph, G.A., 1982, Languages of South Asia: A Guide. *Languages of Asia and Africa*, Vol. 3. Translated by G.L. Campbell, London: Routledge & Kegan Paul.

SOME SOCIOCULTURAL ASPECTS OF PRIVATE INDUSTRIAL CAPITAL IN NEPAL.¹

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Introduction

Some analysts of Nepalese economy and society like Blaikie, Cameron and Seddon (1980) argue that "industrial development has been so limited in Nepal that it is quite impossible to speak of a national industrial capitalist class" (ibid:87). A. Kondos (1987a) argues to the contrary, claiming that such an industrial class has come into being since the mid 1970's and expanded significantly during the 1980s, specifically in five areas of production, namely food, drink, garments, building materials and household durables. Although Kondos's study provides some details of this emergent industrial class, a number of important questions concerning it have yet to be addressed. The principal aim of this paper, which is based on a study of the owners of Nepal's top 140 'medium' and 'large' mechanised manufacturing enterprises in operation during 1989,² is to explore some of those questions and thereby provide a kind of socio-cultural mapping of the Nepalese industrial class itself.

From a theoretical point of view, one issue that needs to be addressed is the question concerning the relationship between class (specifically, industrial class) and caste. Although caste discrimination was legally abolished in the constitution of 1961, caste considerations and practices in this only extant Hindu kingdom were not thereby halted. (Nor did the legislation necessarily prevent discriminatory activities, for that matter.) Even so, given the impact of other kinds of cultural knowledge emerging from within and coming from without, it would be unwise to ignore the presence of variability of attitudes and practices in the area of caste relations. Therefore the problem remains to determine if and how caste considerations, heritage from the past, feature in the new class situation.

Caste designations, it should be added, are complicated in the Nepalese context by notions of ethnicity. While, from a theoretical point of view, it

might be said that caste, necessarily, carries a rank order, whereas ethnicity does not, such a depiction could not apply in the Nepalese situation. Since the various Mulki Ains promulgated before 1951 located particular ethnic groups (for example the Newars of Kathmandu Valley and the assorted 'tribal' groups from different parts of the country) in specific rungs of the official caste order, ethnic groups were rendered and ranked as caste groups (see Sharma 1977; V. Kondos 1982 and 1984).³

Furthermore, caste designations and ethnic categories may be used interchangeably, whenever segments of the population are being discussed. Currently, the term 'Brahmin/Chhetri', signifying the official top castes, is used in official bulletins. The same label may be used in everyday discussions about these high-ranking peoples (whether or not the speakers endorse the high caste placement). At the same time, members of this particular caste may also be described in terms of ethnicity, being called 'Parbatya' (literally 'Hill People'), the ethnic group to which the reigning dynasty itself belongs. Reference to other peoples may be made in terms of their particular ethnic names. For example, the Newars are the indigenous people of Kathmandu Valley whose forebears were conquered by the Parbatya about two hundred years ago; their caste position, according to the old official scheme and those who support it, is below the Parbatya. In as much as caste and ethnic categories appear to be used interchangeably, our analysis follows this convention and so it uses the composite term, 'caste/ethnicity'.

From an empirical perspective, the key question is who are these industrialists (the members of Nepal's industrial class), given that Nepal is a highly heterogeneous society demarcated along lines not only of caste/ethnicity, but also of wealth, education, occupation, gender and age?

Furthermore, in view of the fact that the outlay of capital is hardly minuscule (totalling an investment of approximately 2.25 billion NRs. in 1989), it becomes important to know the sources of investment. Given that the traditional (and to a certain extent current) source of private wealth is large-scale landholdings, did such ownership facilitate the initial financing of their industries? Accordingly, one should be able to chart the route of industrial development that occurred and is occurring in this predominantly agricultural society.

In this regard, we want to emphasise that we are not imposing any of the models of industrial development that inform analysis of this phenomenon in western terms. To adopt such model would be foolhardy to say the least, given that Nepal is a distinctly different social formation and that, where the process of industrial development is occurring, it is not only a different cultural context but at a different time, within a global ambience of advanced industrial capitalism. What we need in the case of Nepal is some appreciation

of the kinds of conditions that have given rise to the recent upsurge of private industrial development. This becomes important because although such development objectives have been in Nepal's national programme since the early 1950s, its occurrence at a significant level is only a fairly recent phenomenon, accelerating most dramatically during the last ten years or so (A. Kondos 1987s).

Against that background of concerns, we might ask not only what were the resources of these industrialists, but also what were the conditions that facilitated their meteoric expansion during the last fifteen years or so. What were the conditions for 'Take-Off', so to speak?

Furthermore, given that Nepal can be described as a highly bureaucratized state with government involvement in economic domains, especially at this level, and a renowned practice of extracting revenue through an elaborate system of levies, duties, and so forth, then it becomes important to inquire into the capitalists' orientation to this machine, how it operates and how it can be negotiated. Therefore we are concerned to know how these industrialists perceive the politico-economic conditions in which they must operate. More specifically, how do they view the Nepalese government's role in relation to their industrial activities?

Another important feature of the Nepalese socio-cultural scene is a characteristic mode of going about realising one's objectives. The sociological and anthropological literature on the topic refers to it variously. Some (e.g. Bailey 1966) have treated such activity as a form of patron-client relationship. Others attribute it as being a somewhat dubious way of getting one's desires fulfilled (Caplan 1971). A. Kondos (1987), however, argues that the cultural format is complicated, containing a number of interrelated procedures, the mode of action Nepalis call *natabad kripabad* (favouritism). He wants to distinguish these from another method that also features the infamous route of bribery (*ghush*) and corruption (*brastachar*). That corruption is a problem is indicated by the various government campaigns to control it, like the numerous corruption committees initiated to investigate the problem. So given the presence of strong governmental controls, the regulations, levies and so forth, as mentioned above, and given the industrialists' concern to make their enterprises operative and profitable, we wanted to find out if any of the traditional ways were resorted to and, if so, which. But since it would have been naive to ask such questions like "do you bribe officials" or "do you engage in *natabad kripabad*", an indirect method was used to gain some understanding of the extent of these practices. The question this study posed related to the industrialists' assessment of the means deployed by the other industrialists in pursuing their goals when dealing with government bureaucrats.

In as much as of these medium and large scale enterprises are jointly owned, being private limited companies (A. Kondos, 1987a), this raises the question of how they are formed. Who exactly combines with whom to form such companies, given, as mentioned earlier, that Nepal is a highly heterogeneous society with a range of caste and ethnic identities? Accordingly, the final question we want to address is: do these industrialists combine along caste/ethnic lines or do they form their companies according to some other social basis (bases)?

Through addressing the above questions we hope to delineate some features of the sociocultural profile of Nepal's industrial class and provide the necessary empirical data for considering one important theoretical issue, the nature of the relationship between class and caste. These are the two principal objectives of this paper.

It should be noted that the time when this study was conducted falls at a critical point: in the year prior to the downfall of the panchayat mode of government and before its replacement by a democratic system based on multi-party parliamentary representation and constitutional monarchy. Already the new government has announced major changes in industrial policy.⁴ How such developments (if they occur) will affect the socio-cultural features of the industrial capitalist class is a moot point. But irrespective of the nature of the new circumstances, any review of these could not ignore reference to the situation under the prior panchayat system. Our general concern is to map that particular situation.

Methodology

A variety of sociological and anthropological methods were used in this study. Chief among these were: participant and non-participant observation, informal discussions with Nepalese experts and government bureaucrats, and interviews with the owners of the 140 leading enterprises of Nepal's manufacturing industries. Thus, both 'qualitative' and 'quantitative' data were obtained.

In so far as most of the quantitative data to be presented here were derived from the interviews with the industrialists, it may be useful to elaborate a little on this particular method.

A highly flexible and conversational approach was adopted in conducting the interviews with the industrialists, thus creating space for the respondents to elaborate spontaneously on any of the topics listed in the interview schedule. The interview schedule itself was designed to promote flexibility in that it did not take the form of a highly structured questionnaire that is usually associated with the collection of quantitative data through interviewing. Instead, mostly 'open-ended' questions, designed to encourage

discussions, were used.

With whom exactly were these interviews conducted? Given that, as we have already indicated, the privately owned medium and large manufacturing enterprises in Nepal in 1989 were companies, any one of which could have been owned by more than one person, interviewing every owner would have made the universe overly large. Furthermore, since we did not want to omit discussions with any of the owners of these 140 companies, and we did not want to adopt a sampling approach but wanted to conduct an open-ended, flexible social inquiry which we deemed to be more appropriate for addressing the kinds of questions we have outlined, our problem was how to restrict the number of interviews without distorting the representation of the universe of companies.

On the basis of advice from Nepalese consultant and from our own knowledge of the Nepalese field, we surmised that if we did interview every co-owner of any one company, this would yield a lot of unnecessary duplication of information. Therefore, we adopted the following procedure in selecting which of the co-owners of any one company would be interviewed:

1. In a company where all the co-owners were of the same caste/ethnic background and were kin or affines, then only one of these co-owners was to be interviewed.
2. In a company where co-owners were not kin or affines but were either of the same or different caste/ethnic backgrounds, then one person from each of the castes/ethnic backgrounds was to be interviewed.

This procedure yielded 220 possible respondents. Only seven refused to be interviewed - a response rate of approximately 92. On this basis we feel that the results of our interviews can be generalized to this particular segment of Nepal's capitalist class, specifically, the owners of the major or largest manufacturing enterprises in operation during 1989.

Analysis

On this basis of the qualitative and quantitative information gathered through our multi-method approach, what can we say about each of the five issues we have posed?

1. Who are Nepal's industrialists?

Consultations with some Nepali experts raised two points which are of interest to our present concern:

- a) That the only industrialists of any significance in Nepal were the Marwaris. Marwaris are Indian migrants to Nepal of several generations. As some of our informants put it: "They are especially

talented in business and have a strong will to succeed, unlike many Nepalīs who expect things to come to them without much effort on their part". Partly with a touch of envy but also with a certain degree of admiration, we were invariably told the homily that "A Marwari comes with only a *dhotti* (loincloth) and *lota* (water container) and ends up becoming a millionaire".

- b) That any of the leading industrialists, including Marwaris, would have to have "palace connection", otherwise he would not make "the big time".

On the quantitative side, the patterning is complicated. We found that of the 203 industrialists we interviewed, 27.6% were Parbatya, 28.1% Newar, 36.0% Marwari and 4.0% consisted of 'Other' Nepalese caste/ethnic categories, that is, the co-called 'tribals', while the remainder (4.3%) were Indian nationals. Clearly, in terms of caste/ethnicity, Nepal's top industrialists are a heterogeneous lot. At the same time, the popular expectation that Marwaris are over-represented in this field corresponds with concrete reality, in that despite their nation-wide demographic minority, the Marwaris constitute the majority of these industrialists. At the other extreme, those least represented, although they constitute a comparatively large segment of the Nepalese population compared to the Marwaris, are those Nepalīs referred to as 'the tribals' (Magar, Gurung, Rai, Limbu, etc.). Given that this particular category is very small relative to the other three caste/ethnic groups that make up this industrial class, we will not draw any comparisons between it and the other three categories, since percentages on such a small base would be very misleading. Therefore all comparisons on the basis of caste/ethnicity will be restricted to the three principal categories: Parbatya, Newar and Marwari. In addition, any comparisons in terms of gender will also be excluded, since there were only 10 females among these industrialists, 4 Parbatya and 6 Newars. Clearly, this segment of Nepal's industrial class is male dominated.

A final point that should be made about the caste/ethnic composition of the industrialists is that we did not find any Untouchables in their ranks. This is hardly surprising given that it is extremely rare for an Untouchable to have the kind of economic base that is required for the level of investment necessary to enter this field, and perhaps because Untouchables are not likely to qualify on several other counts, as will become apparent when we consider some of the other characteristics that these industrialists have in common.

First, in terms of their educational backgrounds, we found that 83% of them had been educated at the tertiary level, 11% to secondary level, 5% to primary level and only 1% claimed that they had not had any formal

education. So, on the whole, these industrialists are highly educated. Within this overall similarity, however, there are some significant differences between the three major caste/ethnic categories.

Marmaris are outstanding with 91% of them being educated at the tertiary level and not one of them being without some formal education. The comparable 'tertiary' figures for the Parbatya and Newars are 87% and 75% respectively.

Secondly, there is the matter of occupational backgrounds. Before becoming industrialists, only a handful of them were engaged in agriculture (4%). The majority were in occupations that are usually associated with urban centres: merchants/traders (35.8%), government administrators (21.4%) and 'professionals' (4%). With regard to the rest (34.8%), however, their current occupation (industrialist) constituted the only 'occupation' they had ever had.

Considered as a whole the overall urban character of the occupational background of these industrialists corresponds with their general level of education. Moreover, 82% of them told us that their places of origin were urban centres, predominantly within the Kathmandu valley.

While that was the general picture, there were some significant differences among the three caste/ethnic categories. Here the most distinct different differentiation occurred with the Marwaris. Not one of them was engaged in agriculture. Instead, for many of them (48%), being an industrialist was their first occupation. With others, it was a merchant/trader background (44%). In contrast to the Marwaris, the Parbatya and Newars had been more widely spread over the various occupations already listed: government administration (38% and 29%, respectively); merchant/trade (23% and 34%, respectively); agriculture (4% and 9%). Most of the remainder of the Parbatya had been 'professionals' (7%) and of the Newars (8%) agriculturalists.

The third area is that of economic resources. It goes without saying that the wealth of these industrialists' is extensive, since they are the owners of Nepal's major private manufacturing firms, as the official definitions of these sizes clearly indicate (see footnote 2). But their factories are not the only index of their wealth. If anything, these assets are an index of the fact that they were wealthy before they became industrialists. Even where loans were necessary to establish these factories, which was the case for 60% of the industrialists, some collateral would have been necessary. Lohani (1976:62) asserts that a ceiling of 75% of the total cost of launching a concern was set on borrowings from financial institutions especially set up to lend on approved industrial ventures, such as NIDC (Nepal Industrial Development Corporation). However, according to the personal experiences of some of our informants, in reality much less than 75% could actually be borrowed from such institutions. Some industrialists told us that they had to provide as

much as 40% of the total investment themselves. Needless to say, this means that such men had controlled considerable personal wealth, given the sizes of the enterprises that they had come to own.

Knowledge of various kinds of movable property owned by the industrialists would also give some indication of the extent of wealth that they command. Yet it is obvious that the subject of personal wealth is a highly sensitive area of research. Therefore the topic was approached in very broad terms only. Consequently, whilst we were able to elicit information on whether an industrialist had any shares ('securities') in some company, it was not possible to determine how many shares, their market value, etc., although there was little difficulty in establishing the number of companies in which an industrialist did own shares. Similarly, whilst information on how many dwellings were owned by a particular individual was forthcoming, again the value of such dwellings was not. Information about landholdings presented similar difficulties. In this instance we were only able to determine how many landholdings a person had, where in Nepal and whether such lands were under cultivation or not, and if so, whether the cultivation was by a relative or a tenant farmer. Finally, regarding their ownership of other businesses, the information gathered was restricted to size specifically whether these were registered as 'small', 'medium' or 'large' enterprises. We labelled each of these kinds of property as follows: 'Shares Capital', 'Domestic Capital', 'Land Capital' and 'Business Capital'.

Focusing on these four kinds of property and operating within the limitations we have just outlined, some idea of the extent of the wealth that these industrialists enjoy was deduced. Hopefully this is more concrete than mere speculation or guess-work.

The total wealth made up of a person's 'Shares Capital' plus 'Domestic Capital' plus 'Land Capital' and 'Business Capital' was estimated for each industrialist. This allowed us to rank all 203 cases of industrialists in terms of wealth. To facilitate a comparison in terms of caste/ethnicity, we divided the rank order into three equal segments: we labelled the top one-third of the cases 'the extremely wealthy', the next one-third 'the very wealthy' and the bottom one-third of the cases as 'the fairly wealthy'.

According to this procedure, the following profile emerged. When we examined the top one-third of the cases (the segment we have called the 'extremely wealthy'), we found that the majority 63% of these were Marwaris, whereas only 20% were Newars and 9% Parbatya. The middle segment, the 'very wealthy', consisted of 40% Parbatya, 35% Newars and 25% Marwaris. The bottom segment, the 'fairly wealthy', was made up of 34% Parbatya, 29% Newars and 21% Marwaris.

What is interesting about the above pattern of distribution, where enormous wealth is involved, is that the thesis which posits that the politically dominant group in a society is also the wealthiest group finds very little support here. Nor does the thesis which defines the top caste as being equivalent to the top class. On either score the politically dominant and high caste Parbatya of Nepalese society do not hold the major share of the wealth in this newly emergent industrial class. Rather, it is the Marwaris, who belong neither to the politically dominant ethnic group nor to the top caste in this society. As a collectivity, they do, however, possess a great deal more wealth than the members of either the other two categories, the Parbatya and the Newars.

2. The Issue of Resources and Conditions for 'Take Off'.

At a general level, we can say that the hard core of industrial capitalists, that is, the giants of private manufacturing in Nepal, were well equipped to lead the way in this field in that they not only had the economic resources but also the appropriate occupational and educational background to enter the industrial field. Here, we should note that most of them had achieved this within the last ten years, since 69% of the enterprises that they owned were first registered within that period, whilst the rest (31%) had been first registered sometime earlier, principally during the early 1970s, according to the records of the Department of Industries. This suggests, among other things, that the combination of resources to which we have just referred was in many cases highly likely to have pre-dated these industrialists' ascension to prominence. If this is so, and our understanding of the situation prompts us to assume that this was generally the case, then we might ask what was it about the recent period that facilitated an acceleration of private investment in the industrial field.

According to a number of Nepalese experts, the necessary institutional structures (e.g., finance institutions like the Nepal Industrial Development Corporation-NIDC) and a great deal of the required infrastructure (e.g., roads and electricity) for the development of privately owned mechanised manufacturing in Nepal had been established well before the 1980s (Lohani 1978). Yet it was not until very recently, as we have seen, that private investment in mechanised manufacturing had really 'taken off'.

We would like to suggest that any understanding of the conditions which gave rise to this development has to take account of the following important factors. First, from the mid-1970s, Nepal has experienced a tremendous growth in its tourist industry (Gurung 1978). This has meant, among other things, a building boom, a high rate of urban growth, and concomitantly, through internal migration, a significant growth of an urban concentrated

landless and unskilled labour force seeking employment in factories and elsewhere (Gurung 1988), as well as an expansion of an urban concentrated consumer market made up not only by the increased presence of tourists but also by an increased number of Nepalis (via internal migration). Some Nepalis, whether newcomers or old residents, appear to have acquired a taste for certain western type goods, as well as the means to buy them, although one would not deny that the cost of such goods was prohibitive for most Nepalis. Even so, a considerable number of Nepalis are helping to augment the demand for such goods that had previously been Indian imports. Local production therefore could profit not only by supplying the tourist demand for such goods but also by wooing, with relatively little effort, a growing Nepalese consumer market.

The next important factor in our view is related to the first, in that it too is connected to the enormous growth in tourism. A number of Nepalis in centres like Kathmandu amassed considerable wealth through providing various kinds of tourist services. Some of this newly acquired wealth was possibly accumulated via illegal means, while that acquired legally was often not disclosed to government authorities so as to avoid paying the required taxes and levies. Accordingly, reservoir of finance was readily available, "awaiting large-scale means by which it could be laundered", as one Nepali put it. According to these reflections on the monetary activities of this period, the generation of "back money" provided one source of finance for investment in the industrial enterprises established at that time. Structural factors also contributed to the phenomenon.

The major structural factors designed to woo private capital into the manufacturing industry became distinctly positive subsequent to King Birendra's ascent to the throne. While previously much of the government's encouragement could be assessed as mainly rhetoric, the government began providing concrete incentives in the late 1970s through to the 1980s (for a list of these incentives see Sitoula 1989:1.12 to 1.14). One of the most important of these incentives was the substantial reduction of import levies on raw materials needed in the production of a number of consumer goods. Thus allowing locally manufactured western types of commodities (all of which relied on imported raw materials) to compete in the market place against similar goods imported principally from India. Levies for exporting such Nepalese manufactured goods were also greatly reduced, thus providing the space for local manufacturers to export any surplus production to India and, in a number of instances, to markets beyond India, for example, as eventually in the case of carpets and garments, to the U.S.A. and Europe. In the case of garments, which was one of the fastest growing industries during the 1980s, the government's lifting of export quotas was also an important

incentive, especially since India applied very strict quota regulations on exporting such production. One of the major consequences of the divergent Indian and Nepalese policies was that many Indian garment entrepreneurs met their overseas consignments through commissioning production in Nepal and exporting their consignments from Nepal. In this way the growth of Nepal's garment industry was boosted, while at the same time it indirectly created the context for some Nepalese themselves to market their production directly rather than through Indian entrepreneurs.

In the matter of industrial continuity, the government made its position clear. In addition, the government's "new industrial policy states emphatically that no enterprise will be nationalized except in the interest of national security" (Sitoula 1989:1.15). It would seem that the drive towards privatisation witnessed in most western countries since the 1970s had its correspondence in Nepal also (see Khatiwada 1986). In this regard the Nepalese government "has announced its intention to sell 20% of its enterprises" to private capital (Sitoula 1989: 1.15).

Given this combination of factors, we can understand at least some of the reasons why investment in private manufacturing took off as it did in this period. We can also better appreciate why this investment was concentrated in particular manufacturing industries, namely, food, drink, garments, building materials and household durables.

3. Industrialists' Views on the Government's Role

Attention has already been drawn to the fact that Nepal is a highly bureaucratized state where rules and regulations govern numerous aspects of economic and political life. This highly centralized system of state control is not a new phenomenon. It characterizes of a very old mode of Hindu statecraft (see Shaha 1962 and V. Kondos 1984). The bureaucratic aspect of that traditional mode of statecraft, with some modifications, still operated during 1989, and whether it will change significantly in character with the recent introduction of 'democracy' remains to be seen. But up to the period of our fieldwork, the Nepalese political economy was essentially of the paternalistic variety, where the customary mode of Hindu statecraft prevailed. This meant, among other things, state intervention. State revenue and thereby state surveillance of its citizens' economic as well as political activities were of paramount interest to its existence. Such a political-economic milieu, one might surmise, does not provide an ideal context for private capital to maximise its interests through straight-forward procedures. For the state capitalist endeavours merely provide yet another field for the exercise of state domination. In explicating the issues in question, one of the state's bureaucrats in the Department of Industries, when asked why was it that

virtually every step that an industrialist has to take to put and keep his enterprise in operation seems to require a government permit, licence or other form of government endorsement of that activity, which invariably means not only an added expense for the applicant but, more significantly, delays, in that government procedures involve a concern for internal checks and counter checks of one government officer by another within the same bureaucracy, this bureaucrat replied: "Obviously, you do not know what the purpose of government is in this country. It is to control."

How did our industrialists' view the matter? We approached this very sensitive topic by submitting to each of our respondents a list of six statements taken from a study conducted by Suvedi, Koirala, Upadhyaya and Pathak (1987). These were quotations from top level business executives. In our consideration, these needed to be quantified, since that study did not specify the extent of their endorsement within the Nepalese business world. Accordingly in our study we sought to provide some idea of weightings. The list of statements and the percentage of the industrialists agreeing and disagreeing with each statement were as follows:

	Agree %	Disagree %
1. "Export policy is not liberal."	75.0	25.0
2. "Among three partners one has to run after Ministers."	68.0	32.0
3. "Government policy is not clear"	82.0	18.0
4. "There is inconsistency in government policy."	90.0	10.0
5. "75 percent of attention has to be diverted towards the procurement of raw materials."	64.0	36.0
6. "No government authority has sense of urgency."	87.0	13.0

This pattern of results indicates quite clearly that there is a great deal of negative feeling among these giants of industry with regard to the areas of government activities covered by the range of statements. Statements 2, 3, 4 and 6, in particular, provoked a lot of commentary from almost all the respondents, some of whom expressed their anger quite volubly against the prevailing government orientation to private industry. One prominent industrialist vented his hostility towards what he saw as government ineptitude by describing its policy as "Fickle, changing every so often. The local market is never protected." Another directed his discontent at the government bureaucrats themselves, describing them as having "double standards". As he put it,

On the one hand, they project their image as devoted civil servants who had to survive on their meagre salary. On the other hand, after duty, at home, they take off their mere government uniforms and change into foreign gear and indulge in imported drinks, sitting in front of their Sony television set and video to relax.

Another highly successful businessman could not hide his annoyance towards the royal family members with whom he was in partnership. He said,

They had not put any money at all in the business but used their position of influence to get things done. But I have to pay the price for it. They ring me up whenever they need money and only once I deliver it do they leave me in peace.

Such elaborations were not isolated occurrences but were frequently made, not only with regard to government policy in general, but also with regard to the bureaucrats' mode of operation and what was often referred to as "palace interference", even by industrialists not in partnership with a member of the royal family. An add hoc approach to policy-making and a prevalence of "corruption" within government bureaucracy as well as at the centre of power, the palace, seem to have been the main sources of the industrialists' discontent with the politico-economic context that they had to negotiate.

Even the statement concerning difficulties encountered in procuring raw materials (statement 5) provoked the same kinds of reactions. Again, the bureaucrats and the palace were perceived as the cause of the problem, rather than the fact that, Nepal being a land-locked country, transporting raw materials from outside meant delay and high costs. These were assessed as due to government imposed regulations and inefficiency.

The account of one aspiring industrialist who had failed to enter the field is instructive. After he had submitted his proposal and application to establish a factory for dry dairy production in Biratnagar and an application for a loan to NIDC, he subsequently received a written statement that the loan had been approved. So acting on this for the next few months he spent several lakhs rupees in preparing for his venture. But at this point he was then informed by NIDC that he should locate his factory in one of the western districts of Nepal rather than in Biratnagar, which is in the east. This meant, among other things, that he would have to finance yet another feasibility study to be carried out in this location by NIDC itself. It became obvious to him that what was being asked for, indirectly, was for him to enter into a '*table muni*' (under the table) type of transaction, that is, to offer a bribe. This he was not prepared to do. So his "dream venture" collapsed. Assessing the situation he concluded, "only the wealthy can become industrialists in this country".

Thus, from a different tack, he repeats the points of the industrialists' commentary.

4. Ways of Getting things Done

We turn to the fourth issue we wanted to address in this study, namely, whether these 'stars' of industry resorted to traditional ways of getting things done:

As noted in our introduction, what we might call the 'cultural pathways' for realizing one's objectives in this society include such valued procedures as *natabad kripabad*, (favouritism), tapping *pahauch* ('source-force') and *chakari* (flattery), which may or may not entail *ghush* (bribery). For reasons already noted, we adopted an indirect method of determining the extent to which these industrialists might have utilised any of these cultural procedures in pursuing their interests. Here we focused on *pahauch*, *chakari* and *ghush* specifically. We did not raise the question of *natabad kripabad* for two reasons. First, there is little doubt about the centrality of this value in Nepal. Secondly, it seems to us that the cultural obligation of doing one's duty towards family and close friends, in this instance to favour them, is a matter of 'if one can, one must', as one Nepali put it, but which in turn signals the fact that to effect that entails having *pahauch* (i.e., access to 'source-force'). Accordingly we thought it more important to focus attention on *pahauch* itself, rather than the broader *natabad kripabad*.

The inquiry was anchored to industrialists' understanding of other industrialists' practices. Specifically, each of our industrialists was asked to comment not whether he himself availed himself of these ways of getting things done, but rather whether he thought other industrialists did so, and the extent to which he thought this was/was not the case. On the issue of *pahauch*, specifically, we asked how important this method was for industrialists.

With regard to flattery (*chakari*), the great majority of respondents (83%) said that they believed 'most' or 'many' of the industrialists used this cultural mode of getting things done, whereas only 12% said 'a few' and very low proportion (5%) said 'none' adopt this way. On the question of bribery '*ghush*', the pattern of responses was very similar, with 84% saying 'most' or 'many' use it, 11% believing that only 'a few' do so, while the remainder (5%) surmised that no industrialist stoops to this kind of strategy. As far as the matter of getting access to those in power (*pahauch*) is concerned, the pattern of responses was even more dramatic, in that 93% said that it was 'extremely' or 'very important' that industrialists have access to source-force in order to succeed in industry.

Furthermore, given the industrialists' perception of the prevalence of such procedures, we might then appreciate what the statement "Of three partners one has to run after the Minister" (endorsed by more than two thirds), is referring to. It is highly likely that such 'running after' brings into play one or the other of these three modes of operation, including the equivocal mode of bribery.

On the broad front it seems that customary practices continue in the new field of industrial relations. In the Nepalese context, as elsewhere, capital is not averse to using whatever the culture itself provides to oil its motor for its accumulation. Out of these, the routes of *pahauch* and *chakari* do not carry the kind of moral disapproval that *ghush* does. But as our respondents' replies also suggest, *ghush* is not something that capital shuns, if this is seen as an effective way of short-circuiting the kinds of obstacles and delays that some government bureaucrats might present.

The customary practices of favouritism (*natabad kripabad*), flattery (*chakari*) and utilizing source-force (*pahauch*) were not the only traditional idioms that these industrialists employed in pursuing their capitalist objectives. Certain Hindu religious practices were also being utilized to this same end.

The question is which ways and by whom. What is of interest for us is that there was no prevarication about one's religious affiliations, and the fact that almost all of the industrialists located themselves in the various faiths that are associated with the region (and the South Asian sub-continent, for that matter), most as followers of the Hindu faith (90%), while of the remainder, 4% proclaimed themselves as Buddhists, 4% as Jains and 2% with 'other' religious faiths. Since a particular ritual form (*puja*) is common to the three faiths and is also a fundamental religious activity, the extent of its practice by these men would indicate a degree of religiosity at least. According to their own testimonies, *puja* is a significant practice for most: 70% of the respondents claimed that they performed this ritual on a daily basis, while only 2% said that they 'never' performed it (none of these non-performers were Hindus, it should be noted). Furthermore, doing *puja* was not only a common practice but an activity where the fate of their industrial enterprise figured. The majority (64%) said that during their performance of the ritual, they "always" asked the gods "to bless" or in some way "to favour" their enterprises. Only 12% stated that they "rarely" or "never" did this. While the future was a concern that was taken up with the gods (though obviously not restricted to this domain), the past was treated in a different context.

The issue here is the doctrine of *karmaphala*, (literally "action fruit"), which specifies that one's past actions channel one's present circumstances.

Exactly how this is regarded and used by the populations concerned and in what social contexts varies despite the sacred texts clarity of its presence and operation in an individual's cycling through the circuits of transmigration. For certain Nepalese Untouchables, it is a highly contestable explanation of their current circumstances, though other castes may and do resort to it as an explanation. Then again it can happen that outstanding success of this or that individual is attributed to the operation of *karmaphala* by other people in attempts to explain their inordinately favourable circumstances (ibid.). It would seem that as far as the industrialists are concerned, when it comes to the question of the connection between the operation of *karmaphala* and their own success, many assumed this as pertinent. Only 12% of the respondents expressed the opinion that *karma* was not relevant to their success, while 86% held the contrary view.

If religiosity and the tenets of its doctrines figured significantly in these men's understanding of their lives especially as industrialists, it was not restricted to these. Many factory owners allocated space for a shrine room. Otherwise a picture of the relevant deity, Laksmi the goddess of wealth, was affixed to the factory wall overlooking the machinery and the factory workers.

It appears that religious beliefs and certain customary religious practices like *puja* were consciously articulated in the field of industrial activity and were perceived to provide yet another mode by which things are done. Therefore it would seem that religion has relevance for the new "secular" enterprises. And in their understanding, "to be a successful industrialist, is to be favoured by the gods", as several of our respondents put it, the connection is seen as substantial. What is also relevant is that a traditional mode of pursuing one's objectives, that is, going to the appropriate source of power, figures in two contexts: to the gods in *puja* and to source-force individuals of the social milieu.

5. The Social Base(s) of Company Formation

We come now to the fifth and final issue we wanted to cover, namely, with whom do these industrialists combine to form their companies? In earlier sections, it has been established that the industrialists constitute a fairly homogeneous category of people inasmuch as they come from that segment of Nepalese society which commands the necessary material resources to venture into this capital intensive mode of production. We have also seen that on the whole they are highly educated, which, in turn, corroborates their wealthy origins, since access to higher education in this society is a privilege of the rich. So, if this is the personnel which owns the 140 operations at the time of our study, then we can say that at least two of the bases on which these companies were formed are wealth and a high level of education.

Another base, which can also be deduced from our earlier discussions, should be explicitly stated here. It should be recalled from the section on 'Methodology' that when joint owners of a company were kin-related or affines, only one of them was to be interviewed. Although the 203 selected constituted a fairly heterogeneous collectivity in terms of caste/ethnicity, they also represent 203 different families. In short, the top 140 manufacturing companies operating in Nepal during 1989 were owned by 200 or so families. We can say, therefore, that the third basis upon which these companies have been formed is kinship.

But what of caste/ethnicity? To what extent, if at all, have the industrialists combined with others of different caste/ethnic background to form these companies? Of the 140 enterprises, 95 (or 70%) of them were partnership where the co-owners shared a common caste/ethnic background. Of these, 58% of the co-owners were Marwaris, 20% Newars, 17% Parbatya and 5% 'Other'.

With the remainder of the enterprises (45 of 30% of the cases), the co-owners of the companies were drawn from heterogeneous caste/ethnic categories. In this instance the three major caste/ethnic categories were represented in the reverse rank order pertaining to caste/ethnic homogeneity, detailed above. This time it was the Parbatya who predominated in 80% of the cases, next the Newars in 49%, with the Marawaris now being represented in only 40% of the cases. The remainder (36%) being 'Other'. Obviously, the total percentage here far exceeds 100%, since in any one company several different castes/ethnicities are involved; thus the same company may be designated more than once as having a co-owner of a particular caste/ethnic background.

What does this mean? Common caste membership appears to be significant, yet this itself is the result of other considerations. It would seem that in those companies where co-ownership entails a homogeneity of caste/ethnic origin, it is kinship which acts as the magnet for the formation of a company, provided that other factors such as wealth and education, mentioned earlier, remain constant. This factor seems to be operative most vividly among the Marwaris.

With regard to those companies where co-ownership is characterised by caste/ethnic heterogeneity, it appears that while cross-categories are fairly common, this is most pronounced with the Parbatya. More industrialists from this caste/ethnic background were willing to combine with other caste/ethnic persons to form substantive companies, just as more members of other caste/ethnic persons chose to enter into co-ownership with the Parbatya for whatever reasons. So when it comes to the question of crossing caste/ethnic boundaries to form partnerships and establish the capitalist

enterprise, it is the combination with Parbatya that is preferred. In either case, being a Parbatya signifies that caste/ethnic boundaries are less likely to mitigate against the formation of a capitalist partnership.

This of course is not to deny the contention that kinship is the principal magnet in the formation of a company. The relevance of kinship is not limited to the case of private company formation. Even with Public Ltd. Companies (and there were 15 such companies in our study), kinship played a major part in ensuring their establishment. For example, we found that in many instances, those floating such a company had to call in kin to buy the 'securities' or shares because other members of the general public failed to do so.

Given the centrality of the *natabad kripabad* orientation to the world in this culture, we would expect that not only kinship but also friendship would be an important consideration in choosing the persons with whom one would be prepared to enter into co-ownership of a company, again assuming that wealth and education levels are held constant. Therefore respondents with non-kin partners (108 of them) were questioned about the duration of their friendships. They were asked how long they had known each other prior to becoming business partners. While 31% of these respondents claimed that they had known their non-kin partners for ten years or more prior to entering into their current joint venture, 69% claimed that they had known them 'since early childhood' or 'since their school-days'.

Yet it was not only duration of friendship that was important, but the contours it had assumed over the years. Commentaries on the nature of the relationship attest the point. The sentiment expressed in one observation, "We are very old and close friends. We are like family", catches the general orientation. Insofar as friendships, forged during childhood and continuing through to adult life, take on a surrogate kinship status for these Nepalis, then in such circumstances, a 'familial face' of capital is being established, albeit 'surrogately'. Just as in the other circumstances, family corporations constitute the dominant mode of formation.

Theoretical Implications.

It is evident from this study that one cannot be dismissive of industrial development in Nepal, at least as far as the private sector is concerned, for it is not as minuscule as some commentators are wont to declare whether expressed in the Nepalese media, the learned journals or elsewhere. However, it is the sociocultural constituents of this class that are relevant to a consideration of the major theoretical issue we posed at the outset, specifically, the nature of the relationship between class and caste.

With regard to the agricultural sector of production, Blaikie, Cameron and Seddon have observed, and we think rightly, that class cuts across caste (1980:85). In the case of Nepal's industrial class, whose existence is denied by these authors, the intersection between class and caste (or, for reason already outlined, what we have designated as caste/ethnicity) is far more complex than is the case with the agricultural class structure outlined by Blaikie, Cameron and Seddon.

On the basis of our analysis, it appears that there are at least six important dimensions to the Nepalese industrial capitalist class at this stage of its development. Not necessarily listed in any order of importance, they are:

1. A common background of wealth,
2. Similar urban-based occupational background;
3. Sameness in level of education;
4. Predominantly male;
5. Largely 'tradition-bound'; and
6. Highly differentiated along caste/ethnic lines.

A brief comment on each of these dimensions, indicating how certain of them are interconnected, may be useful before we draw any general conclusion on the issue concerning the relationship between class and caste.

With regard to the background of wealth, that is, wealth held prior to becoming an industrialist, we have illustrated that such wealth was not entirely based on landholdings. This suggests that we do not have here a simple linear progression where members of "the hereditary aristocracy" or of "the landholding gentry" (Blaikie, Cameron and Seddon 1980:85-87) decide to become industrialists, for, as we have shown, the great majority of Nepal's industrial giants come from a wealthy merchant background or alternatively from urban-based occupational backgrounds. These in turn are not dominated by members of the top caste/ethnic group of this society, the Brahmin/Chhetri or Parbatya, but by Newars and Marwaris, both of whom constitute demographic minorities in Nepal.

Their wealthy and urban-based backgrounds largely account for the fact that these members of Nepal's industrial class are highly educated, since educational opportunities are concentrated in urban centres and, as in most other countries, mainly accessible to the relatively well-off members of a society. High education as a commonality of this class is significant in the Nepalese context, in that it is generally assumed to be a key factor in the so-called 'modernisation' process. In Nepal, the notion of modernisation is closely linked to the idea of industrialisation and, both ideologically and in practice, inexorably tied to high education (see Malla 1979).

Given the discriminatory nature of the law governing inheritance against women, despite a number of recent reforms to mitigate gross inequalities in this field (see Bennett 1981; V. Kondos 1989), and given women's subordinate position vis-a-vis men in Hindu culture generally, it is not surprising that women are virtually absent in the forefront of the Nepalese industrial class. Probably, like most women in Nepal, the wives of these industrialists are kept busy running their husbands' domiciles and thereby propping up their industrial fortunes, so to speak.

The fifth aspect relating to this industrial class is what we have here labelled 'tradition-bound'. Reference was made to the general cultural practice which is oriented along the lines of *natabad kripabad* (getting family and friends to act as your protagonists) as the way to get things done. Industrialists claim that this also has relevance for their capitalist pursuits. It was also shown that family and friends were relevant to the ways companies were formed.

This mode of company formation has further analytic significance, linking as it does to Weber's considerations. If we take the two principal bases of company formation, 'familial' (kinship) and 'familiarity' (friendship), then it is evident that companies are not constituted as impersonal entities, dependant on expertise and other so-called 'rational' considerations, as with Weber's conceptualization of rationality pertaining to western industrial societies, but rather on personal factors. While wealth and education are important, they are not determinant. With the kinship stress ('familial' and 'surrogate familial'), what one might call 'corporate endogamy' seems to be operative here. This could be viewed as a non-rational basis of company formation according to Weber's theory. But given the Nepalese sociocultural context where *natabad kripabad* figures prominently, and given the then prevailing politico-economic conditions that the Nepalese state structures impose, the personalized modes may also, paradoxically, be seen to be the most rational ones. Here rational is used in Weber's sense of subscribing to effective means to realise one's goals in these particular circumstances.

With the exception of caste/ethnicity, the Nepalese industrial capitalist class appears to be fairly homogeneous socioculturally. This does not mean that caste is irrelevant to class. Rather, we want to stress that the relationship involved is intersected by a number of other factors as those we have listed above. Accordingly, it becomes somewhat simplistic to claim, as is often the case in the literature and in everyday conversations, that the dominant class (in this instance the industrial capitalist class) is equivalent to the top caste. At the same time, however, it is the caste/ethnic composition of this class that most clearly disturbs its overall homogeneous character. Put differently, whilst dimensions 1 to 5 highlight the homogeneity of the Nepalese

industrial class, its heterogeneous character is displayed most clearly in terms of caste/ethnicity only. In this regard, it should be recalled that it is not the members of top castes/ethnic group (the Brahmin/Chhetri or Parbatya) who predominate, but rather minority caste/ethnic groups such as the Marwaris and the Newars, neither of whom are placed at the top end of the caste hierarchy by Nepalis who resort to the official scheme.

At this juncture, it is of relevance to notice that the absence of Untouchables appears to give some support to the thesis that there is a close correspondence between caste and class. But to sustain the general argument would entail a conception of caste hierarchy as consisting of two strata only, 'clean' and 'unclean' castes, which would constitute a gross distortion of the complex realities of the Nepalese caste system. Moreover, it is also important to bear in mind that while Untouchables (and to a lesser extent, women) do not figure among the giants of Nepal's industrial class, this does not preclude the possibility that Untouchables (and probably, women) are active in the small industrial enterprises that were not considered in this study.

Notes

1. The authors would like to thank the Australian Research Council for funding the research upon which this paper is based. We are also greatly indebted to the industrialists who gave their time and attention to the issues they were asked to discuss.
2. According to the Department of Industries' criteria, operative at the time of our study, an enterprise with fixed assets (principally machinery) of less than three million NRs was classified as "small", one with three or more million but less than ten was defined as a "medium" sized enterprise, while one with ten or more million was categorized as being a "large" enterprise. Since our study focuses on the owners of the 'medium' and 'large' industrial firms, clearly we are dealing with what we might call the giants of the Nepalese industrial class.
3. This is not to deny the contestability of the caste order. But in the Nepalese Legal Codes the form that order took was legally clear-cut and enforceable by the state.
4. The interim government has committed 445 million Nepalese rupees for the establishment of a so-called "Export Processing Zone" in Kathmandu in order to "increase Nepal's foreign exchange earnings" and "to create more job opportunities" (The Rising Nepal, January 2, 1991).

According to the press release, this will be the first of a series of such zones in the country specifically designed to attract investments from international capital.

In the meantime, the current Nepalese government has sent an 18 member delegation to India, consisting of fifteen industrialists and three government officials, "with the objective of encouraging the establishment of Industries in Nepal with the joint investment of Nepalese and Indian industrialists and to promote export of Nepalese products to India by simplifying the export procedures to India" (The Rising Nepal, January 14, 1991). Thus, a two-pronged plan to expand Nepal's industrial development is imminent co-operative industrial ventures with Indian industrial capitalists and with industrial capitalists from elsewhere in the world participating in the proposed "Export Processing Zones", mentioned earlier.

Reference

- Bailey, F.G. 1966. "The Peasant View of the Bad Life." *Advancement of Science*, 3:114 (Dec.), pp. 399-409.
- Bennett, L. 1981. "Tradition and Change in the Legal Status of Nepalese Women," Vol. 1, Part 2 (M. Acharya and L. Bennett eds.) *The Status of Women in Nepal*. Kathmandu: CEDA
- Blaikie, P., Cameron, J. and Seddon, D. 1980. *Nepal in Crisis: Growth and Stagnation at the Periphery*. Delhi: Oxford University Press.
- Caplan, L. 1971. "Cash and Kind: Two Media of 'Bribery' in Nepal." *Man*, 6:1, pp. 266-278.
- Gurung, H. 1978. "Tourism Trend in Nepal." *Industrial Digest*, 6:8, pp. 1-7.
- _____, 1988. "Nepal: Consequences of Migration and Policy Implications." *Contributions to Nepalese Studies*, 15:1, pp. 67-94.
- Khatriwada, Y.R. 1986. "The Drive to Privatisation in Nepal." *Strategic Studies Series*, No. 8-10, pp. 68-87.
- Kondos, A. 1987a. "A Preliminary Study of the Private Sector of Nepal's manufacturing Industry." *Contributions to Nepalese Studies*, 14:2, pp. 99-110.

_____, 1987b. "The Question of Corruption in Nepal." *Mankind*, 17:1, pp. 15-29.

Kondos, V. 1982. "The Triple Goddess and the Processual Approach to the World." In M.R. Allen and S.M. Mukherjee (eds.), *Women in India and Nepal*. Canberra: Australian National University Press, pp. 242-286.

_____, 1984. "Nepalese Absolutism?" *South Asia* (new series), 7, pp. 47-71.

_____, 1989. "Subjection and the Domicile: Some Problematic Issues Relating to High Caste Nepalese Women." In J. Gray and D. Mearns (eds.), *Society from Inside-out: Anthropological Perspectives on the South Asian Household*. New Delhi: Sage.

Lohani, P.C. 1978. "Private Sector Participation in Industrial Development." *Industrial Digest*, 8:1, pp. 61-70.

Malla, K.P. 1979. *The Road to Nowhere*. Kathmandu: Sajha Prakashan.

Shaha, R. 1982. *Essays on the Practice of Government in Nepal*. Delhi: Monahar.

Sharma, P.R. 1977. "Caste, Social Mobility and Sanskritization: Study of Nepal's Old Legal Code." *Kailash*, 5:4, pp. 277-299.

Sitoula, O.K. 1989. *Survey on Industrial Relations*, Tokyo: Asian Productivity Organization.

Suvedi, P., Koirala, K. Upadhya, N., Pathak, J.K. 1987. *Industrial Development in Nepal*. Tribhuvan University: Institute of Management.

POLICIES ON FOREIGN EXCHANGE AND BALANCE OF PAYMENTS: AN ASSESSMENT OF THE BACKGROUND FOR THEIR EFFECTIVE USES IN THE NEPALESE CONTEXT*

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Introduction

The world economy today has a unique property of being so integrated that no nation is independent in setting its philosophical framework in relation with economic reforms and transformations. A consistent Country Specific Policy package, nevertheless, may be deduced based on certain specific working assumptions determined by national parameters which, in turn, reflect divergent socio-economic behaviours specific to the country under consideration. These parameters are either the manifestations of the degree of social change, the pattern of geographical, physical and demographic structure, or the socio-economic milieu. Group efforts at the international level, however, always exist for a unique world order evolving out of desire to achieve a common goal, say, a certain standard of social living.

This paper raises the question of international monetary reform during the decades following 1944, when a mutual understanding was reached internationally for an orderly arrangement of exchange relationships. The intent is to assess various policy approaches that have been initiated to overcome constraints of international reserve assets found in Nepal and elsewhere. The central focus is the policy problems facing Nepal, arising from the imbalances in Nepal's international account, the Nepalese style of tackling these problems and some specific but pertinent generalisations with their policy implications.

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A Brief Account of the Theory Related to Policy Issues

The mechanisms of receipts and payments sharply divide economic units here and abroad into individuals, business enterprises and the public sectors. This uniquely involves the use of currencies or some other money market instruments (or other proxies) serving as the means of exchange for the settlement of national as well as international debt. While the settlement of domestic debt leaves a little room for the use of various currencies, the international payments are made in terms of only those key currencies acceptable to all parties involved in trade and other official and private transactions. Those possessing sufficient means of exchange in current account have an easy but unrestricted right to own and dispose of purchasing power; those deficient in such international money must engage in more complex practices of exchange rationing. At the extreme, nations facing serious payments crises undergo rigorous measures in attempt to moderate the so called liquidity problem.

With time, when the world trade in goods, services and currencies is expanding, and the overall supply of the international means of exchange is unable to match this excessive increase in demand, a particular country has no choice but to maintain faith in its currency and prevent capital flight by taking stringent official measures influencing free market operations. These measures include exchange control, devaluation, and the direct regulation of physical and financial flows. These are, however, the extreme versions of official measures taken by a nation facing a serious payments crisis. A brief account of the sources of such trouble follows.

When the flows of services, materials, money, information and technology between countries are expressed in monetary values and recorded in a country's international account, it is easy to compare debits with credits. This helps identify the intensity of the liquidity problem. If the excess of payments over receipts is an indication of high economic inefficiency, as usually found in low income countries such as Nepal, the opposite is true for economies with a strong, efficient production base which remains as strong possibility for those nations with technological sophistication, often known as developed countries.

Of course, the origin of the payments problem has a strong foundation in the domestic gap of income and expenditure, monetary and financial imbalance, and the greater size of the fiscal deficit; all of which are experienced by Nepal. These gaps or imbalances are so interknit that all the real monetary, financial, fiscal, foreign, and other sectors experience simultaneous changes. Their behaviours, then, are determined within the Walrasian general equilibrium framework. While the "supply responds" hypotheses of Keynes, Friedman and the new classicists have a particular

mechanism of economic adjustment, the "demand responds" thesis of the classicists, structuralists and some others have differing views on the movement of variables. Altogether, if changes are introduced in one sector, the rest of the others react disproportionately, depending upon how much these sectors are sensitive to such changes, the length of the lag in variables' adjustment, and the values of parameters such as the propensity to consume, import, etc.

Whatever is the source of payments crisis (deficit), policy measures in any form - including the regulation of foreign assets, reserves, and exchange rate changes - mostly work through the channels of demand and supply forces in real sectors. These measures force the Balance of Payments line, or the IS curve, to shift on the right, or the LM curve to the left.

However, for a small and open economy like that of Nepal, which intends to keep demand and supply situations in proper order and, accordingly, to shift either of these curves, special attention is required, as this economy is sensitive to *exogenous* foreign shocks that keep domestic levels of activities out of policy control. This question will again be fully accounted in the following discussion.

The Nepalese Economic Framework for Policy Operation

Nepal has wide scope of using the vast potential of its geographical setting to provide a perpetual source of income from tourism: land that helps to grow food, industrial raw materials and exportable products, and a labour force which replaces capital in the process of building hard as well as soft infrastructure.

In order to mobilise these stocks of national wealth and provide a lubricant to the economy in the process of production by generating adequate surplus for reinvestment and capital formation, the only thing Nepal requires is technological transformations, as there is the immense scope for the introduction of new and appropriate technology in all the fields of agriculture, industry and services. The major issues, therefore, regard the economic exploitation of the given stock of wealth and the increased flow of income therefrom, and not the inferiority complex developed out of the psychology that Nepal is without an adequate resource base.

Nepal is equally rich in the availability of various other sources of energy like wind and water resources. These equally important sources of productivity growth can be uniquely exploited to ensure the supply of basic the needs bundle and production inputs. This will also help satisfy household needs, afforestation, reduce the unemployment problem, increase foreign exchange earnings, save scarce vehicle currencies and accelerate the pace of overall development.

Of course, Nepal took steps in initiating planning and policy measures thirty years before and made several attempts in lifting this economy out of its low level equilibrium trap. The success, however, was so little that the country could neither reduce the size of absolute poverty nor limit overall excessive foreign dependence represented by higher ratios of external trade and aid and foreign economic influence on the sectoral policy package. Resources were wrongly diverted towards the sectors reaping immediate gains and away from agriculture and basic industries.

As most of the equilibrating mechanisms under the existing situation, such as prices, real interest rate, the market determined value of Nepalese money in terms of foreign currency, etc., are determined in the world market, the domestic economy finds itself at all times in a vulnerable and unstable position arising out of "maintained disequilibrium." More specifically, when the terms of trade between Nepal and the rest of the world are independent of domestic policy choices (as the degree of openness for this economy is high, say, almost one third of the GDP when defined in terms of the ratio of total trade to GDP), in no case is Nepal capable of keeping market forces in its favour. Unless policies in general are molded as per Nepal's unique features, and trade policy in particular is designed to support the domestic production base in industry and agriculture, this vulnerable position of the economy is likely to continue even if Nepal adopts a most-popular exchange rate regime like the one we have now.

Again, in view of the rough and inefficient working of the underdeveloped domestic market system and a failure to guide activities properly through wrongly handled official price changes, whose concern was with a multidimensional role, including their ex-ante effect on employment, industrial climate, social prestige and the distribution of assets in the hand of the weaker section of society, the unsystematic involvement of the public sector in the name of growth and social change was expected to make the state extravagant. It was indicated by the bigger size of public expenditure and the high ratio of government investment, which accounted for almost fifty percent of the total. More than a decade long sluggish trend was observed in private sector investment for several productive sectors. Financial indicators also acknowledged this reality in that even if the fund was held by various banking and non-banking financial institutions, the real economy was unable to demonstrate a market success. Planning failed either to determine an appropriate framework for desired structural changes in all the spheres of national life or to drive market forces to work for a healthy economic order.

The most vulnerable situation for Nepal is the country's geographical weakness which has always kept the economy in its regular disorder. Nepal is India-locked, even in policy choices and effects. A high but perfect

complementarity between the two economies and an absence of a competitive interdependence in their market structure have undoubtedly led the exchange system to work always in India's favour. Nepal experiences the status of a periphery nation whose job is to serve the interest of a centre extracting cheap labour and raw materials and, in turn, selling finished products. The regular trend of a growing deficit in Nepal's trade with India is an outcome of such "unequal exchanges."

Likewise, Nepal is hardly independent in exercising her third country trade policy, as the treaty of trade and transit with India in 1950 encroached into this area by restricting Nepal's right to determine additional taxes on Indian goods, and, thus, by undermining a situation where imports from a third country can compete in Nepal's market. With this, the trade diversification policy of Nepal has completely collapsed into an Indian monopoly over Nepalese foreign trade.

These factors, together with "open border," "free trade only in Indian goods," and the "one but open window" trade policy (described earlier) of Nepal arranged by treaties with India over the years, have set the patterns of our underground economy, industrial and agricultural growth, and the overall development philosophy. We are thus India-locked in all ways.

There were basically two flaws in our past decisions about the choice of development philosophy. While, on the one hand, we did not over years go against a liberal trade policy for one or another political reasons, the inherent weakness in Nepali thinkers, on the other hand, was the faith in the Keynesian type of "supply responds hypothesis." These philosophical mistakes eventually led the economy to reap little gain in terms of the growth of domestic activities like income, private investment, employment, export surplus, etc., and of its sustainable character. Everything here was governed by uncertain supply positions not responding to demand as created by unprecedented growth of a tertiary sector enjoying mostly foreign goods and competing with the household consumer in the domestic market. In most cases, a high liquidity position of the economy, together with market gaps, hoarding, and bottlenecks on the supply side, opened room for speculation which led to further market uncertainty. Foreign exchange rates (except for IC) too were susceptible to this money and goods market situation, for which the deviations of the margin of market rates from the actual official rates was significantly high. From this, not only real investment suffered, but also the society was sharply divided between privileged and underprivileged groups of people. As the latter compete with the former in same market place but possess money with different utility, the nation experienced a net welfare loss; the majority of people in the country are poor, underfed, illiterate, unhealthy and unemployed.

Apparently, unless some effective measures are worked out and national perceptions are rightly proposed for a better future, the economy is expected to remain incapable of insulating itself from external shocks and overcoming internal market dichotomies which exert their adverse and unpredictable impact on domestic levels of economic activities, including foreign exchange earnings in the private sector accounts. A special treatment, however, is required for dealing with the unrestricted movement of Indian currency, whose value in terms of Nepalese Rupees is fixed, as this practice has given birth to the problem of capital flight to India, as well as to the transmission of Indian inflation equiproportionately into Nepal.

Nepal's Policies on Trade, Foreign Exchange and the Balance of Payments

The foreign sector in Nepal has remained as the balancing factor, and this role in particular is an outcome of its inability to adjust between domestic demand and supply of goods and services at a time when the economy is incapable of working anywhere near the maximum capacity level (almost ninety percent of industrial and other capitals in Nepal are working below capacity level). This problem of capacity utilisation has, of course, deprived the nation of opportunities for enjoying an economy of scale; hence, the economy is fragmented in character.

Of the various foreign accounts balances of Nepal, such as current, trade, transfer, capital, etc., the current account balance has been found to be a critical factor determining overall economic stability. Balances in the other accounts have remained either positive or are the expost effects. Means, foreign official borrowings, and drawing on international reserves are the only consequences of a deficit in the current international account (the main item of which is visible trade). The size of foreign commercial capital too is small less than ten percent of total investment, owing to low attraction.

Although historically Nepal's effort was directed to achieve a balance in the growth and expansion of exports and imports, trade and current account deficits have never been overcome. Instead, their size is growing with time. As a consequence, the inflow of aid from both official and unofficial sources has been increasing. This has led to additional implications of monetary, budgetary, employment and price factors. In this sense, the foreign sector in Nepal has been playing a predominant role in promoting growth or achieving stability or both.

For trading purposes, goods in Nepal are classified into three categories: (a) completely banned, (b) subject to quantitative restrictions, and (c) free of restrictions. Of the items traded, imports comprise mainly of capital goods, raw materials and consumer goods. The distribution pattern of imports is

presented here, percentage-wise.

	Construction material	Capital equipment	Fuel	Rest of others	Total
1980/81	11.86	7.44	12.36	68.33	100.00
1986/87	12.90	22.55	9.60	54.95	100.00

Source: Department of Customs, H.M.G., Foreign Trade Statistics (Various Issues)

These figures show that the proportion of essential goods imported in total must not be less than sixty percent.

Major exports, however, are composed of ready made garments, woollen carpets, pulses, goat skins, cardamom, raw jute, handicrafts, hides, herbs and raw materials.

Even if the growth rates for these exports and imports are not that completely unsatisfactory, the import to export ratio is fast growing over time. This indicates that Nepal is experiencing an increase of its trade gap through time, and that the size of deficit for trade with India is substantial. This is an outcome of an open economic structure that Nepal has with respect to India. Even though Nepal's trade with the rest of the world is more or less controlled, the size of this is increasing too, as the domestic requirement for consumption and investment is substantially high. Consequently, the adjustment burden in the foreign sector has mostly been borne by government through either official agreement or changes in policy choices. Officially, the government has been insisting on meeting the savings gap through an inflow of aid from both bilateral and multilateral sources. Mostly, donors have assisted our economy by financing expenses related entirely to projects, experts and import surplus (foreign exchange gap). Policy choices like devaluations, on the other hand, have been introduced with infrequent changes; and the only regular practice has been to impose quantitative restrictions (regulations), especially in our trade with third countries. This latter practice virtually shapes our trade related policy on foreign exchange (i.e. convertible). Quantitative restrictions on services import, as well, are commonly exercised through a regulation of exchange availability rights for buying health, education, travel and other services abroad.

So far Nepal has a trade and hence exchange relation (agreement) with more than fifty countries, with India as the major trade partner. In the SAARC region, the second place is occupied by Bangladesh. The trade relation with other SAARC members is not so significant or substantial. Recently, trade transactions with the rest of the world have been gaining momentum.

In effect, India's share in Nepal's trade has come down from almost one hundred percent in early the 1960s to around forty percent during recent years. Even then, there is rarely any improvement in the current account balance, as the Indian import to export ratio is growing over time.

In all, the aims of Nepal's trade, aid, balance of payments and foreign exchange policies may be summarised as:

- a. Transform Nepalese society into a modern one and reduce excessive dependence on Indian for trade.
- b. Achieve a material balance. That is, the policies are expected to work the way that these serve as the factors stabilizing economic activities.
- c. Promote the productive base of all the sectors inclusive of agriculture, industry and services, and increase thereby the size of the cake to be distributed.
- d. Strengthen the export base and explore mechanisms for export promotion and import substitution.
- e. Acquaint the economy with foreign or modern technology more productive and less expensive and train manpower required to handle development problems.
- f. Encourage the private sector and keep state trading activities within the limits set for the supply of essential goods like petroleum products.
- g. Restrict trade of certain goods like drugs, jewellerys, weapons and explosive material, wireless sets, cigarettes, etc., and regulate trade according to the national interest.
- h. Help simultaneously supply service inputs like banking, insurance, transport, communications, etc. and expand trade in goods and services.

The government of Nepal, accordingly, takes direct as well as indirect measures affecting the international flows of goods, services, aid, foreign currencies and the financial fund. While direct measures include the issue of licences, the fixation of quotas, specification of goods and services free of quantitative restrictions, the grant of permission for moving commercial capital, fixation of the amount of foreign exchange affecting the trade in goods and services, the agreement for project aid with donor, specification of the rules and areas for the effective utilization of foreign exchange, determination of subsidies and tariff rates for traded goods, etc., the indirect measures cover the set of macro as well as micro-economic policies needed for raising economic efficiency and for improving the balance of payments. The latter also include the quotation of foreign exchange rates for major currencies.

In recent years, the country has initiated a new economic reform programme (namely SAP) with the aim to increase economic efficiency,

maintain stability, liberalise economic activities and improve the international reserve position and balance of payments. All of the macro-economic policies, inclusive of monetary, fiscal, trade and foreign exchange, have been brought under this reform programme. Various other sectoral and micro-economic policies are also devised for overcoming bottlenecks, rigidities and supply shocks. Mainly, policies are expressed in terms of liberalization or decontrol of fiscal, monetary and financial reform packages.

Of course, this is a significant departure spelled out in terms of a need for structural change. The question, however, is how effective the programme would become in the context of our economic framework described in section three above. This doubt is meaningful given that the supply response to price and exchange rate changes is very low, owing to various institutional and structural deficiencies, inclusive of trade and transit provisions in treaties with India that regulate Nepal's export to India but provide free Indian export to Nepal, geographical barriers, weak export base, higher propensity to import, an unrestricted flow of Indian currency across the border that encourages illegal activities and capital flight from Nepal, fixed rate of exchange between NC and IC in view of the system of all other exchange rates daily adjusted with international rates for currencies in the basket, etc. A recent economic report by the Nepal Rastra Bank also supports this thesis when it explicitly proves that this economy is not obeying the rules set for the new reform programme; hence there is no indication for its structural change. Indicators that fail to confirm the support the reform program are: the unexpected increase in prices of all goods and services, especially of essentials, the growing size of the current account deficit, the excessive dependence on international borrowing, decrease in the proportion of development expenditure of the H.M.G, the increasing size of the gap for trade with India, excessive dependence of HMG on Nepal Rastra Bank for internal borrowing, higher proportion of indirect taxes in total tax revenue, traditional dependence on weather of agricultural production, high liquidity position of the economy caused by excessive growth of money supply, stagnating trend of financial savings represented by fixed account deposits with banks, and so on. Neither is there an improvement in trade and current account balances nor the display of any structural change by the economy. The only improvement is in capital account balance. An economy which regularly borrows, but fails to increase the capacity for debt servicing, will obviously be unable to sustain the development process. Nepal now belongs to this category. The effect of the depreciating value of NC on the size of public and private budget - when both these sectors need greater spending for essential import, is further a matter of anxiety. Prices go up, interest rates increase, wages increase and the foreign exchange reserves decrease. Eventual

effects are increased costs of production, unfavourable terms of trade and a weak balance of payments position.

Conclusion

Official regulations on the uses of foreign exchange are the necessary steps taken by any state whose concern is with the productive and economic utilisation of available resources and the reversal of adverse trends in its balance of payments. The need for such regulations arise when the automatically adjustable market system fails to remain effective in mitigating the so-called liquidity crisis generated out of import surplus.

The balance of payments, of course, has now been a policy problem. It's resolution also requires a package of other measures changing the rate of exchange, the interest rate structure and some other viable mechanisms affecting both the aggregate demand and supply. The precondition for a successful operation of these official shocks, nevertheless, is a competitive but plastic (sensitive) economic framework.

Nepal, of course, lacks such a 'built-in system' of the market structure and, hence, is in favour of regular public intervention in almost all the markets, including that of foreign exchange which aims at an effective management of liquidity crisis. The approach, however, is not independent of the development philosophy long established from during the 1940s, although there were several amendments in view of the change in world economic situation, needs and perceptions.

However, the basic feature of Nepal's economy is that it experiences a strong centre-periphery relationship between Nepal and India, a very weak integration of Hill-Terai and east-west economies, the rural-urban dichotomy, the free and open but cost free movement of people, material, information and financial funds across the southern border, unsystematic intervention in the public sector, inconsistencies in various industrial, trade, foreign exchange and other policies, the high development requirement of building social and economic infrastructure, a difficult topography pressing always for higher costs of production, and the working of the economy. The Nepalese market system is fully distorted. As the economy is highly susceptible to market speculations of price changes for goods, foreign exchange and the real estate, the allocation of investible resources is mainly for hoarding, and not for promoting the industrial and agricultural base which helps sustain long term growth and income distribution. Thus, trade in goods, services foreign exchange and real estate has occupied a significant place in the Nepalese economy. This has put the government in a great trouble, in that it should either choose an interventionist approach for tackling the problems through changes in the structural and institutional background, or leave the economy

to operate freely. While the former choice, the regulation of the vast demand and supply forces with their domestic vis-a-vis foreign origin, is too ambitious, the latter causes social injustice in that those few who control most of the resources and official decisions will take all advantage at the expense of the majority's happiness. Unless we strike a plausible balance between the interests of politicians, administrators and the business financiers, the productive sectors will find themselves further underdeveloped, for which external over-dependence may continue in future years. The question, therefore, is not of demand management as such, but of the change in economic structure to make the economy more provocative for self-reliance and competitive interdependence. The policies to-date on foreign exchange and balance of payments are inadequate in that they are not helpful in our drive towards the achievement of these goals. Hopefully, we shall be moving in the right direction.

References

Fritz, Machlup, 1983. *Lecture on International Monetary Issues*. PIDE, Islamabad.

Nepal Rastra Bank, 1990/91. *Economic Report*.

Pant, Raghab D., 1991. "Towards a New Development Policy." *The Economic Times*, March-June, pp. 12-24.

Sharma, Gunanidhi, 1991. "Nepal's Development Philosophy: A Critical Review." *The Economic Times*, March-June, pp. 34-37.

_____, 1989. *A Macro-economic Study of Nepalese Plan Performance*. Nirala Publications, New Delhi.

_____, 1987. *Monetary Structure of the Nepalese Economy: Policy Issues in Theory and Practice*. South Asian Publishers, New Delhi.

_____, 1986. "An Analytical Basis of the Policy of Devaluation: The Nepalese Case." *Vikas*, Vol. 8, No. 1, Jul.-Aug., pp. 13-17.

_____, 1982-84. "A Simple Model of Nepali Monetary Sector." *Arthaniti* (Department of Economics: Calcutta University) Vol. xxiii, pp. 43-54.

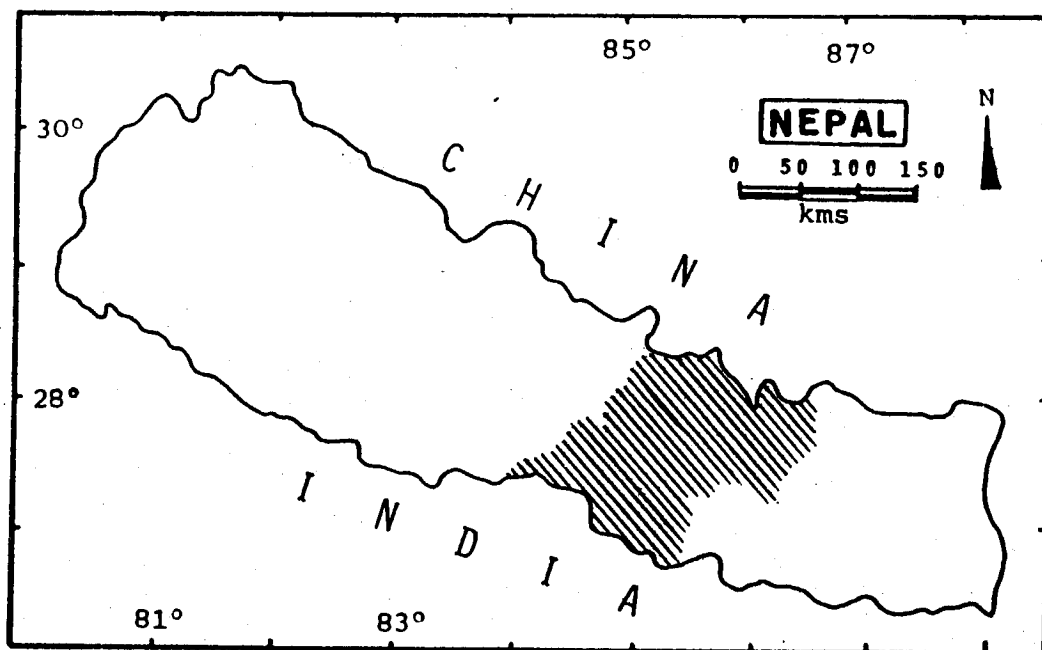
_____, 1992. "Nepal; The State of Economy." in Ramakant and B.C. Upreti (eds.), *Indo Nepal Relations* Delhi: South Asian Publisher, India and International Book Company, USA, pp. 197-211.

ETHNOBOTANICAL STUDIES IN CENTRAL NEPAL: THE PRESERVATION OF PLANT-FOODS

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Introduction

Plants have always been an inevitable part of the life and culture of the Nepalese people. Like many other uses of plants, the preservation of plant foods is an age-old tradition in the Nepalese society. A study on the ceremonial plant foods of central Nepal is already in the record (Bhattarai, 1989). The present paper is an attempt to document the various plant - food preservation techniques currently practiced in central Nepal.



Map 1. Location of study area in the country

Methods of Study

The study area, which included 15 districts (Kathmandu, Lalitpur, Bhaktapur, Kabhrepalanchok, Sindhupalchok, Rasuwa, Nuwakot, Dhading, Bara, Parsa, Rautahat, Makawanpur, Chitwan, Ramechhap and Dolakha) of central Nepal (Map 1), was surveyed repeatedly between 1984-1988, in different seasons along various transects. Interviews were conducted with the villagers and urban inhabitants of different ethnic backgrounds. Information regarding the plant parts and methods of their preservation were recorded in detail. Frequently, the procedures were observed, the preserved plant-foods were tasted, and occasionally they were even used in the field by the investigator. The voucher specimens were collected with the help of informants. Their botanical identity was confirmed at the National Herbarium (KATH), where herbarium specimens of wild plants and samples of some preserved plant-foods are deposited.

Findings

In the following enumeration, methods of plant-food preservation and the plant-parts utilized have been described. For each plant, its Latin name, family and Nepali names have been given successively in parentheses.

A. Drying

Drying by dehydrating the plant parts under the sun is the most commonly used method of preservation. For accelerated and complete dehydration, the succulent parts are bruised or cut into small pieces. After drying, they are mostly stored in air-tight containers. The product is frequently re-dried for prolonged preservation.

Commonly, the leaves with petioles of the following species are dried for preservation: various species of arum (*Arisaema concinnum* Schott; Araceae; 'Banko', *Arisaema costatum* [Wall.] Martius; Araceae; 'Banko', *Arisaema flavum* [Forsk.] Schott; 'Banko' and *Arisaema speciosum* [Wall.] Martius; Araceae; 'Sarpa ko makai'), cauliflower (*Brassica oleracea* L. var. *botrytis* L.; Cruciferae; 'Kauli'), cabbage (*Brassica oleracea* L. var. *capitata* L.; Cruciferae; 'Bandakobi'), taro (*Colocasia esculenta* [L.] Schott; Araceae; 'Karkalo'), rat-tail radish (*Raphanus caudatus* L.; cruciferae; 'Newari mula'), turnip (*Brassica rapa* L.; Cruciferae; 'Shalgam'), radish (*Raphanus sativus* L.; Cruciferae; 'Mula'), taro (*Remusatia vivipara* [Roxb.] Schott; Araceae; 'Kalo pindalu', 'Jangali pindalu') and fenugreek (*Trigonella foenum-graecum* L.; Papilionaceae; 'Methi').

The leaves that are dried together with their petioles and tender twigs belong to: onion (*Allium cepa* L.; Alliaceae; 'Pyaj'), garlic (*Allium sativum* L.; Alliaceae; 'Lasun'), wild garlic (*Allium wallichii* Kunth; Alliaceae; 'Ban

lasun'), fragrant onion (*Allium tuberosum* Rottl.; Alliaceae; 'Dundu'), prickly amaranth (*Amaranthus spinosus* L.; Amaranthaceae; 'Lunde'), amaranth (*Amaranthus viridis* L. Amaranthaceae; 'Latte'), 'Indian rape' (*Brassica napus* L. var. *napus* L.; Cruciferae; 'Tori'), black mustard (*Brassica nigra* [L.] Koch; Cruciferae; 'Kaltori'), leaf mustard (*Brassica juncea* [L.] Czern. and Coss. subsp. *integrifolia* [West] Thell; Cruciferae; 'Rayo'), kohlrabi (*Brassica oleracea* L. var. *gongylodes* L.; Cruciferae; 'Gyathkobi'), garlic pear (*Crataeva unilocularis* Buch.-Ham.; Capparidaceae; 'Barun', 'Sipligan'), pigweed (*Chenopodium album* L.; Chenopodiaceae; 'Bethe'), caper-bush (*Capparis spinosa* L.; Capparidaceae; 'Baghmukhe'), shepherd's purse (*Capsella bursa-pastoris* [L.] Medic.; Cruciferae; 'Tori jhar', 'Tori ghans'), fennel (*Foeniculum vulgare* Mill.; Umbelliferae; 'Sunf'), lizard's tail (*Houttuynia cordata* Thunb.; Saururaceae; 'Gane', 'Gande'), garden cress (*Lepidium sativum* L.; Cruciferae; 'Chamsur'), Indian poke (*Phytolacca acinosa* Roxb.; Phytolaccaceae; 'Jaringo'), Solomon's seal (*Polygonatum cirrhifolium* [Wall.] Royle and *Polygonatum verticillatum* [L.] Allioni; Liliaceae; 'Khirro'), vegetable mallow (*Malva verticillata* L.; Malvaceae; 'Laphe sag'), smilacina (*Smilacina purpurea* Wall.; Liliaceae; 'Sikari sag'), wild cucumber (*Solena heterophylla* Lour.; Cucurbitaceae; 'Golkankri') and buckwheat (*Fagopyrum esculentum* Moench; Polygonaceae; 'Fafar'). These are washed with hot water and cooked like vegetables.

Likewise, the petioles of Indian rhubarb (*Rheum australe* D. Don; Polygonaceae; 'Padamchal') and tender shoots of vegetable smart weed (*Aconogonum molle* [D. Don] Hara; Polygonaceae; 'Thotne') are cut longitudinally, and dried. Young shoots and vegetative buds of the fig tree (*Ficus lacor* Buch.-Ham.; Moraceae; 'Kabthro') and the succulent petioles of the begonia plant (*Begonia picta* J. E. Smith and *Begonia rubella* Buch.-Ham. ex D. Don; Begoniaceae; 'Magarkanche') are gently crushed and dried. These being sour in taste, are mostly used in pickles and curries.

The leaves, petioles and inflorescence of Nepal aromatic garlic (*Allium hypsistum* Stearn; Alliaceae; 'Jimbu' are dried. It is used as a flavouring agent in curries and lentil soup.

The leaves and stem-bark of Indian Cassia ligna (*Cinnamomum tamala* [Buch.-Ham.] Nees & Eberm.; Lauraceae; 'Tejpat') are dried and preserved. These are used as a spice to flavour curries, lentil soup, vegetable and meat.

The corm of arums (*Arisaema concinnum* Schott, *Arisaema flavum* [Forsk.] Schott and *Arisaema speciosum* [Wall.] Martius), taro (*Colocasia esculenta* [L.] Schott) and tubers of yam (*Dioscorea deltoidea* Wall. ex Griseb. and *Dioscorea pentaphylla* L.; Dioscoreaceae; 'Bhyakur'), white yam (*Dioscorea alata* L.; Dioscoreaceae; 'Tarul') and potato yam (*Dioscorea bulbifera* L.; Dioscoreaceae; 'Githa') are peeled, cut into small

pieces and dried. These may be cooked like potatoes after prolonged boiling or ground into flour to prepare breads.

The rhizomes of East Indian arrowroot (*Curcuma angustifolia* Roxb.; Zingiberaceae; 'Barkhe saro'), costus (*Costus speciosus* [Koenig] Smith; Zingiberaceae; 'Kust'), polygonum (*Bistorta macrophylla* [D. Don] Sojak; Polygonaceae; 'Dalle ghans', 'Dalle jhar'), Solomon's seal (*Polygonatum verticillatum* [L.] Allioni), wild cucumber (*Solena heterophylla* Lour.), christophine (*Sechium edule* [Jacq.] Sw.; Cucurbitaceae; 'Iskus'), nut grass (*Cyperus rotundus* L.; Cyperaceae; 'Siru', 'Mothe'), old-world arrow head (*Sagittaria trifolia* L.; Alismataceae; 'Lapta', 'Dantema') and lizard's tail (*Houttuynia cordata* Thunb.), are washed, sliced, dried and preserved to use as vegetable or to ground into flour. The rhizomes of the ground orchid (*Satyrium nepalense* D. Don; Orchidaceae; 'Dalle ghans', 'Thamni') and orchis (*Dactylorhiza hatagirea* [D. Don] Soo; Orchidaceae; 'Panchaunle', 'Hastajadi') are also dried and preserved to use as food or medicine.

The swollen root of elephant-foot yam (*Amorphophallus campanulatus*) [Roxb.] Blume ex Dcne.; Araceae; 'Ole') is peeled and cut into pieces to dry. These are boiled to cook like vegetables or made into pickles.

The fleshy root of turnip (*Brassica rapa* L.) and rat-tail radish (*Raphanus caudatus* L.) are made into thin slices and dried. In the case of radish (*Raphanus sativus* L.), when the slices are made, it is called 'Chana' and when these are cut vertically to half or more of the thickness, but the slices are not made separate retaining the original shape, it is called 'Sanjana'. These are used as vegetable during off-season.

The flowers and floral buds of mountain ebony (*Bauhinia variegata* L.; Caesalpiniaceae; 'Koiralo'), camel's foot tree (*Bauhinia purpurea* L.; Caesalpiniaceae; 'Tanki'), silk-cotton tree (*Bombax ceiba* [L.] Sw.; Bombacaceae; 'Simal'), Nepalese elephant apple (*Dillenia pentagyna* Roxb.; Dilleniaceae; 'Tantari') and agati sesbania (*Sesbania grandiflora* [L.] Poir.; Pailionaceae; 'Agasti') are dried and preserved to use as a vegetable or to prepare pickles. Likewise, the flowers of tree rhododendron (*Rhododendron arboreum* Smith; Ericaceae; 'Gurans') are dried and preserved to use as an ingredient in pickles, and also powdered and mixed with flour to prepare sweets and breads.

Fruits of pumpkin (*Cucurbita pepo* L.; Cucurbitaceae; 'Farsi'), white gourd (*Benincasa hispida* [Thunb.] Cong.; Cucurbitaceae; 'Kubhindo'), tomato (*Lycopersicon lycopersicum* [L.] Karst.; Solanaceae; 'Golvenda'), bitter gourd (*Momordica charantia* L.; Cucurbitaceae; 'Tite karela'), balsam apple (*Momordica balsamina* L.; Cucurbitaceae; 'Barela'), christophine (*Sechium edule* [Jacq.] Sw.), lady's finger (*Abelmoschus esculentus* [L.] Moench; Malvaceae; 'Ramtoriyan') and wild cucumber (*Solena heterophylla*

Lour.) are sliced and dried as preserved vegetables. Unripe fruits of banana (*Musa paradisiaca* L.; Musaceae; 'Kera') are also preserved likewise to cook like potatoes.

Crushed fruits of Indian gooseberry (*Phyllanthus emblica* L.; Euphorbiaceae; 'Amala') and hog-plum (*Spondias pinnata* [L.f.] Kurz; Anacardiaceae; 'amaro') are dried to use in pickles. In the case of Nepalese hog-plum (*Choerospondias axillaris* [Roxb.] Burt & Hill.; Anacardiaceae; 'Lapsi'), the fruits are boiled and peeled. The pulp is separated from the seed. Both the fruit-coat and the pulp are dried separately and preserved to use in pickles and curries. The unripe fruits of mango (*Mangifera indica* L.; Anacardiaceae; 'Aanp') and plum (*Prunus domestica* L. subsp. *insititia* [L.] Schneid.; Rosaceae; 'Alubokhara') are cut into small pieces and dried for the same use. Mature fruits of pear (*Pyrus communis* L.; Rosaceae; 'Naspati'), apple (*Malus pumila* Mill.; Rosaceae; 'Syau'), wild pear (*Pyrus pashia* Buch.-Ham. ex D. Don; Rosaceae; 'Mayal'), Eve's apron (*Ficus auriculata* Lour.; Moraceae; 'Nimaro', 'Timila') and peach (*Prunus Persica* [L.] Batsch; Rosaceae; 'Aru') are cut into thin slices, dried and preserved as dry fruits. Likewise, the ripe fruits of Indian berberry (*Berberis aristata* DC. and *Berberis asiatica* Roxb. ex DC.; Berberidaceae; 'Chutro'), sea buckthorn (*Hippophae salicifolia* D. Don; Elaeagnaceae; 'Ashuk'), Nepalese berberry (*Mahonia napaulensis* DC.; Berberidaceae; 'Jamanemandro'), bastard oleaster (*Elaeagnus infundibularis* Moniyama; Elaeagnaceae; 'Madilo'), Indian wax tree (*Rhus parviflora* Roxb.; Anacardiaceae; 'Sati bayar', 'Bhakki amilo') and Java plum (*Syzygium cumini* [L.] Skeels; Myrtaceae; 'Jamun') are dried and preserved for future uses. The fruits of Chinese date (*Zizyphus mauritiana* Lam.; Rhamnaceae; 'Bayar') are dried and preserved to use as such or to prepare pickles. The dried fruits of caraway (*Carum carvi* L.; Umbelliferae; 'Jangali jira') and cow parsnip (*Heracleum nepalense* D. Don; Umbelliferae; 'Budo okhati') are preserved to use as a spice to flavour food-stuffs.

B. Boiling

This method is employed to prepare 'Chuk' which is the evaporated juice of sour fruits or other plant-parts. The juice is gently boiled to obtain a concentrated liquid with increased strength. It is preserved in air-tight containers and used in pickles and curries. The preservation period mainly depends upon the extent of concentration, and 'Chuk' that has been preserved for 20 years or even more is not uncommon. Fruits like lime (*Citrus aurantifolia* [Christm.] Swingle; Rutaceae; 'Kagati'), lemon (*Citrus limmon* [L.] Burm.f.; Rutaceae; 'Jyamir'), rough lemon (*Citrus jambhiri* Lush.; Rutaceae; 'Jyamir'), pummelo (*Cirtus decumana* L.; Rutaceae; 'Bhogate'), citron (*Citrus medica* L.; Rutaceae; 'Bimiro') and pomegranate (*Punica*

granatum L.; Punicaceae; 'Darim') are extensively used to prepare 'Chuk'. Occasionally, the juice squeezed from the sour petioles of Indian rhubarb (*Rheum australe* D. Don) is also employed to prepare 'Chuk', and preserved.

C. Smoking

This method, although uncommon has been observed. Usually, the tender shoots of vegetable smart weed (*Aconogonum molle* [D. Don] Hara), Indian rhubarb (*Rheum australe* D. Don), taro (*Colocasia esculenta* [L.] Schott) and arums (*Arisaema utile* Hook. f. ex Schott; Araceae; 'Dhokyo'), *Arisaema concinnum* Schott and *Arisaema flavum* [Forsk.] Schott) are placed or hanged above the fire-place in the kitchen to dry. The smoke is said to ensure preservation for a longer period. The typical flavour of the smoke is yet another characteristic identity of the preserved food. This method is usually employed in the high-altitude localities, and particularly during the rainy season.

D. Fermentation

In this method, the plant parts are subjected to natural fermentation through dumping until they attain the characteristic aroma with sour taste. It is employed to prepare the following types of food-stuffs for preservation.

a. Gundruk

The fresh leaves are gently pounded, the juice is squeezed out of them, and they are allowed to wilt under the sun for a few hours. This is then dumped tightly into an earthen vessel, the mouth of which is covered by sal leaf (*Shorea robusta* Gaertn.; Dipterocarpaceae; 'Sal'), or any other hard, broad leaf, and pressed by a stone. After a week or so, when the process of fermentation is completed, the fermented leaves are taken out of the vessel and spread in the sun to dry. The product is called 'Gundruk,' which has a characteristic aroma and a typical sour taste. This dried 'Gundruk' is used by frying in oil or butter with spices and made into a curry by adding water, preferably that obtained from rice-wash ('Chaulani'). The gundruk may be washed in hot water and made into pickles for immediate consumption.

Every leafy vegetable could be made into 'Gundruk,' but those commonly in practice are Indian rape (*Brassica napus* L. var. *napus* L.), black mustard (*Brassica nigra* [L.] Koch), leaf mustard (*Brassica juncea* [L.] Czern. & Coss. subsp. *integrifolia* [West] Thell), cauliflower (*Brassica oleracea* L. var. *botrytis* L.), kohlrabi (*Brassica oleracea* L. var. *gongylodes* L.), turnip (*Brassica rapa* L.), radish (*Raphanus sativus* L.), rat-tail radish (*Raphanus caudatus* L.), cabbage (*Brassica oleracea*

L. var. *capitata* L.), butter cup (*Ranunculus diffusus* DC.; Ranunculaceae; 'Sarro'), blister butter cup (*Ranunculus scleratus* L.; Ranunculaceae; 'Sarro'), Indian poke (*Phytolacca acinosa* Roxb.), shepherd's purse (*Capsella bursa-pastoris* [L.] Medic.), water cress (*Rorippa nasturtium-aquaticum* L.; Cruciferae; 'Lahure sag') and arums (*Arisaema utile* Hook. f. ex Schott and *Arisaema flavum* [Foršk.] Schott.).

b. Sinki

'Sinki' is the fermented product of radish (*Raphanus sativus* L.) root. It bears a typical flavour and a sour taste. Although widely used, for a person unaccustomed to this dish, 'Sinki' may give an unpleasant flavour and taste.

To prepare 'Alo sinki', which literally means moist 'Sinki', the radish roots are dumped in a pit lined with sal leaves. Leaves like those of banana (*Musa paradisiaca* L.) and mountain ebony (*Bauhinia variegata* L.) or any other of hard-texture may also be used. Leaves are also used to cover the top after placing it in the pit, and the whole package is covered with soil for 10-12 days necessary to undergo fermentation. After repeated washes the product is used in pickles and curries. This type of 'Sinki' is meant for immediate consumption, as it can be preserved for only about a month.

To prepare 'Sukeko sinki', which literally means dry 'Sinki', radish roots along with the lower portion of the petioles and even the immature leaves are cut longitudinally into 4 pieces. These are again cut transversely into 5-8 cm sizes and packed tightly in an earthen vessel. The pot is closed by affixing sal-leaves or any other hard-textured leaves and placed in a sunny place for about 3 weeks. The contents are then removed, dried under the sun, and preserved for future use in pickles and curries. Such a dry 'Sinki' can be preserved for a longer period, although it is less acidic and also bears low flavour as compared to the previous type.

c. 'Tama'

'Tama' is the fermented product of the tender shoots of bamboo (*Dendrocalamus hamiltonii* Nees & Arnl. ex Munro.; Poaceae; 'Tama bans'). Tender shoots are sliced into thin chips and subjected to underground dumping, the pit being covered from all sides by sal leaf or any other hard-textured leaves as in the case of 'Sinki'. In about 2 weeks, the sliced bamboo-chips attain the characteristic fermented aroma with desirable sour taste. Such a method is generally employed for the large-

scale production of 'Tama' for commercial purposes. Therefore, the bamboo-chips are usually adulterated with those of the non-edible solid bamboo (*Dendrocalamus strictus* [Roxb.] Nees; Poaceae; 'Jangali bans') or the flowering stalks of the century plant (*Agave cantula* Roxb.; Agavaceae; 'Ketuki').

For domestic consumption, the sliced bamboo-chips are washed, drained and dressed with turmeric powder (*Curcuma domestica* Val.; Zingiberaceae; 'Besar'), Indian rape oil (*Brassica napus* L. var. *napus* L.) and ground seeds of leaf-mustard (*Brassica juncea* [L.] Czern. & Coss. subsp. *integrifolia* [West] Thell) and subjected to fermentation in an earthen vessel. A wooden vessel or wide-mouthed glass bottle may also be used. After about 3 weeks, when the fermentation finishes, these can be used in pickles and curries. 'Tama' too, like 'Sinki', can be dried for longer preservation and is called 'Sukeko tama', literally meaning dry 'Tama'. However, in general, when 'Tama' is prepared for drying and preservation, the bamboo shoot chips are subjected to fermentation without oil or spices.

d. Pickles

Various types of pickles are prepared for use in the near future involving the fermentation principle. The plant-parts most commonly used for the process are fruits of cucumber (*Cucumis sativus* L.; Cucurbitaceae; 'Kankro'), ash gourd (*Benincasa hispida* [Thunb.] Cogn.), chocho (*Sechium edule* [Jacq.] Sw.), petioles of taro (*Colocasia esculenta* (L.) Schott), roots of radish (*Raphanus sativus* L.) and curd of cauliflower (*Brassica oleracea* L. var. *botrytis* L.). The plant part is cut into pieces and wilted in the sun for few hours. It is then dressed with ground seeds of leaf-mustard (*Brassica juncea* [L.] Czern. & Coss. subsp. *integrifolia* [West] Thell), turmeric powder (*Curcuma domestica* Val.), rape oil (*Brassica napus* L. var. *napus* L.) and common salt in varying proportions, depending upon tradition and taste. It is kept in an air-tight container, preferably in a wooden or earthen vessel, for about a week to undergo fermentation. As this fermented product cannot be preserved for a long period, it has to be consumed within a few weeks.

E. Acidic preservation

a. 'Purano achar'

'Purano achar' literally means a long-preserved pickle; a period of 15 or even 20 years is not uncommon. Various spices such as the fruits of cumin (*Cuminum cyminum* L.; Umbelliferae; 'Jira'), fennel (*Foeniculum vulgare* Mill.), ammi (*Trachyspermum ammi* [L.] Sprague ex Turill;

Umbelliferae; 'Jwanu'), wingleaf prickly ash (*Zanthoxylum armatum* DC.; Rutaceae; 'Timur'), and the seeds of leaf-mustard (*Brassica juncea* [L.] Czern. & Coss. subsp. *integrifolia* [West] Thell), fenugreek (*Trigonella foenum-graecum* L.) and radish (*Raphanus sativus* L.) are fried in rape oil (*Brassica napus* L. var. *napus* L.) and then boiled in enough quantity of citrus juice, notably lime (*Citrus aurantifolia* [Christm.] Swingle), lemon (*Citrus limon* [L.] Burm. f.), rough lemon (*Citrus jambhiri* Lush.), pummelo (*Citrus decumana* L.) or citron (*Citrus medica* L.) until the juice becomes viscous. It is then poured into an air-tight container, some rape oil is added, and it is preserved.

b. 'Nimki'

Lime fruits (*Citrus aurantifolia* [Christm.] Swingle) are washed and rubbed against a rough stone from all sides so as to remove a thin layer of the bark. These are kept in a glass bottle, some salt is added from the top, and it is placed in a sunny place. Sometimes, fresh lime-juice is also added before sun-fermentation. The additional lime juice is intended to submerge the fruits to avoid fungal infections. If the lime-juice is insufficient to submerge the fruits, these are occasionally displaced with a dry stick or spoon, to keep them saturated. After about 2 weeks, these are ready to be served, and they remain edible for the next 20 years or even more. Sometimes, these are also dried for preservation or to carry along during outings.

F. Sugary preservation

This method of food preservation, involving the fruits, is actually the domestically prepared jam, locally called 'Goram'. Mature fruits of pear (*Pyrus communis* L.), guava (*Psidium guajava* L.; Myrtaceae; 'Amba'), peach (*Prunus persica* [L.] Batsch), wild pear (*Pyrus pashia* Buch.-Ham. ex D. Don; Rosaceae; 'Mayal'), plum (*Prunus domestica* L. subsp. *institia* [L.] Schneid.), apricot (*Prunus armenica* L.; Rosaceae; 'Khurpani'), and unripe fruits of mango (*Mangifera indica* L.) or walnut (*Juglans regia* L.; Juglandaceae; 'Okhar') are peeled, sliced and boiled with sugar until the mixture is thick. Fruits like Nepalese hog plum (*Choerospondias axillaris* [Roxb.] Burt & Hill.), gooseberry (*Phyllanthus emblica* L.), box myrtle (*Myrica esculenta* Buch.-Ham. ex D. Don; Myricaceae; 'Kaphal'), yellow strawberry (*Duchesnea indica* (Andr.) Focke; Rosaceae; 'Bhuin ainselu') and Himalayan yellow raspberry (*Rubus ellipticus* Smith; Rosaceae; 'Ainsela') are directly boiled in sugar solution with powdered spices like black pepper (*Piper nigrum* L.; Piperaceae; 'Marich') ginger (*Zingiber officinale* Rosc.; Zingiberaceae; 'Aduwa'), greater cardamom (*Amomum subulatum* Roxb.;

Zingiberaceae; 'Alainchi'), cardamom (*Elettaria cardamomum* Maton; Zingiberaceae; 'Sukumel'), Indian cassia ligna (*Cinnamomum tamala* (Buch.-Ham.) Nees & Eberm.), cinnamon (*Cinnamomum zeylanicum* Blume; Lauraceae; 'Dalchini') and clove (*Syzygium aromaticum* [L.] Merr. & Perry; Myrtaceae; 'Lwang'). Instead of sugar, molasses may also be used. The amount of sugar used, the extent of evaporation, and the thickness of the sugar solution determine to the preservation-time period.

G. Oily preservation

This method involves the preservation of spices with unripe mangoes (*Mangifera indica* L.) in the form of pickle. Unripe mangoes are cut into longitudinal halves along with the seeds. The endosperm is removed, which results in the formation of a concave groove. These are dressed with turmeric powder (*Curcuma domestica* Val.) and welted in the sun for 1-2 hours. Various spices such as fenugreek (*Trigonella foenum-graecum* L.), ammi (*Trachyspermum ammi* [L.] Spague ex Turill), cumin (*Cuminum cyminum* L.), black pepper (*Piper nigrum* L.), fennel (*Foeniculum vulgare* Mill.), black cumin (*Nigella sativa* L.; Ranunculaceae; 'Mungrelo'), coriander (*Coriandrum sativum* L.; Umbelliferae; 'Dhaniya'), wingleaf prickly ash (*Zanthoxylum armatum* DC.), chillies (*Capsicum annum* L.; Solanaceae; 'Khursani'), as well as the seeds of radish (*Raphanus sativus* L.), Indian rape (*Brassica napus* L. var. *napus* L.) and leaf-mustard (*Brassica juncea* [L.] Czern. & Coss. subsp. *integrifolia* [West] Thell), are mixed in varying proportions, according to tradition and taste, and fried. These are then crushed with desired quantities of asafetida (*Ferula assafoetida* L.; Umbelliferae; 'Hing'), rape oil and salt. This mixture is then placed in the concave grooves of the mango halves and kept in a wide-mouthed glass bottle with a sufficient amount of rape oil. It can be consumed after about a month, and it remains good for 20 years or even more.

Discussion

Food is the most important of the basic human needs and, undoubtedly, plants supply the major portion of the human foods. The present investigation provided information on a number of our long existing indigenous styles of plant-food preservation. The tradition of plant-food preservation appears to be a wise step towards the rational use of available resources in the best way possible when abundant, for the days of food scarcity. Among the 123 species, sub-species and varieties of plants that are preserved or at least used as preservatives, 71 entities, including the common spices, are the cultivated or exotic ones.

In remote areas, the preserved plant-foods were mostly of wild origin, while those in urban areas were dominated by the cultivated group. Likewise, in remote areas plant-foods were mostly preserved for use in times of food scarcity, while the same in the urban localities were intended to provide variety to the diet.

Most preserved foods are hardly distinguishable from the adulterated ones. Hence the adverseness of the possible adulterants, mostly in the commercial productions, must be questioned. As various techniques are employed to preserve plant-foods, some of which are also credited with curative properties, and as some of them preserve foods for 15 or even 20 years, their merit must be scientifically evaluated in relation to their nutritional and hygienic virtues, whereas harmful practices, if any, must be discouraged.

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Reference

- Bhattarai, N. K. 1989. "Ethnobotanical Studies in Central Nepal: the Ceremonial Plant-foods". *Contributions to Nepalese Studies*, 16:1, pp. 35-41.

BOOK REVIEW

Monk, Householder, and Tantric Priest: Newar Buddhism and its Rituals. 1992. David N. Gellner. Cambridge University Press. Pages 428, Price £50.

Gellner's book concerns one of the latest studies on the Newars of the Kathmandu valley dealing with Newar Buddhism. Newar Buddhism, like the Newars themselves, has intrigued scholars from the days of Hodgson in the last century. In the whole of the Indian subcontinent, traditional Buddhism (to distinguish it from neo-Buddhism) has survived only in Nepal, where it has evolved certain intriguing features unusual to Buddhism elsewhere. Gellner's book presents this Buddhism from an anthropologist's perspective as it survives and is being practised by the Buddhist Newars today. The inquiry on the Newars is uniquely comprehensive and thorough.

Newar Buddhism managed to survive and preserve its distinct sectarian identity amidst an overwhelming Hindu milieu, prevailing not only in Nepal but also in India. It has to sustain itself entirely on its own, shorn of all intellectual and ideological contacts with the centres of mediaeval Buddhism in Nalanda, Vikramasila and Odantapuri in North India, after their destruction by the invasion of the Muslims there in the 13th century. In Nepal, even under the rule of the Newar kings, Newar Buddhism was obliged to exist within the framework of a caste society of a Hindu state. After the onset of the Shah rule in the middle of the 18th century, the odds faced by it increased even further. Today, Newar Buddhism has shed the monastic character of classical Buddhism, with its clergy living the life of married householders like everyone else. However, this has not led them to forsake their pretensions of being Buddhist 'monks' although they now serve their creed primarily by dispensing household rituals to their laity and acting as priests at Buddhist temples and shrines, which in practice resembles the role of the Brahmans in Hinduism. The title of Gellner's book tries to sum up precisely this underlying fact of Newar Buddhism.

The methods of study in Gellner's book, which is an ethnographic study of religion, consist of gathering data from direct observation and through

information and interpretation of religious acts supplied by the participants themselves. Such religious acts relate to the Newar Buddhists' outlook, world view, ritual practices, acts of piety, and religious behaviour in their daily life. To this Gellner adds material from his readings of the secondary sources on Buddhism and Nepal. Gellner's study of religion makes a different and revealing account of Newar Buddhism at variance with the purely theoretical, doctrinal studies derived from Buddhist scriptures and texts. He does not wholly eschew the use of religious texts in his work. But these are limited to ritual and liturgical manuals compiled by local Buddhist pandits, which he claims, bolster emic methods in anthropology.

In a sociological study of religion, the inner meanings and significance are best understood through a presentation of the practitioner's own viewpoint. Religious acts and vocations assume many forms and levels of performance. Such rituals have a multitude of names and social purposes. They have their annual and cyclic calendars, preparatory pre-ritual acts, venues of performance, and ritual items and accountrements, with their standard and local terms of reference. These must be duly recorded and presented in their appropriate social context. In this aim, the study differs vastly from the mere doctrinal and philosophical enunciation of religion and description of its various rituals.

The current setting of Newar Buddhism leads Gellner to compare it with Newar Hinduism, Tibetan Buddhism and Theravada Buddhism. His concern for a synchronic study has not led him to ignore the doctrinal development of Buddhism in its principal historical stages, as despite some unusual features, Newar Buddhism remains, in essence, true to the teachings and ideals of Mahayana Buddhism. In its present form it has combined and carried forth the ideals of the Disciple's Way (*Sravakayana*), the Diamond Way (*Vajrayana*) and Tantric Buddhism (*Tantrayana*).

Gellner's emphasis on interpretative religion generally follows a Weberian approach. In one respect, however, Gellner differs from Weber. He faults Weber for seeking to minimise and disregard the role of the Newar Buddhist laity (Ures). In Gellner's opinion, the consideration of laity is also crucial.

The Vajracarya and Sakya Priests as well as their laity, represented by the Ures chiefly, have enacted their mutual roles and functions and expressed their affirmation of rituals in a well-ordered, hierarchised scheme. Gellner builds up and introduces a hierarchical notion in Newar Buddhist ritual performances which he intends to parallel with the social hierarchy and the caste-like gradation among Newar Buddhists. This has understandably permitted him to rationalize the Vajracaryas and Sakyas as closing in their ranks from other groups and adopting a hereditary principle of descent in social membership for themselves.

A hierarchy is indicated in the manner in which progression and advancement in spiritual attainment is gradually attained by the seeker. These ritual gradations have made a hierarchical rise in rank for a Vajracarya priest over all the others possible. The highest enlightened state of Buddhahood- the ultimate aim of a Buddhist practitioner- now stands to be epitomized by a Vajracarya who has scrupulously led himself through all these ritual steps. By the powers of these rituals, his monkhood remains unimpaired, even though he may actually be a married person and a householder.

Anthropologists are rarely willing to draw general conclusions from their study outside the narrow confines of their social groups in a limited geographical space. Gellner too sets out to define his limitations. His study is primarily based among the Sakya and Vajracarya members of Kwa-baha of Ward no. 15 of Patan city. It is partly extended to include the members of nearby Cika-bahi. But since Gellner's subject is one of the religions of Greater Tradition, and not just that of a village religion, his study required that he look beyond this group. This has meant including the entire city of Patan, city with its 80,000 population, and even discussing all the Newar Buddhists of the Kathmandu Valley as a whole. This is a strength rather than the weakness of the book, because it imparts greater validity to the book's conclusions.

Today Newar Buddhism is a bound and isolated entity: ethnically, culturally, historically and geographically. The very name Newar Buddhism testifies to this fact. This name does not impart a sense of national Buddhism in the manner of Sri Lankan, Burmese, Thai or Tibetan Buddhism. Nor is Newar Buddhism understood in the sense of a specific sect within Buddhism, such as the Theravada, or Gelug-pa, or Sakya-pa sects within Tibetan Buddhism. It is a religion practised by a small group of Newars in Nepal. It survives as a threatened minority religion in a Hindu kingdom. Lately, Newar Buddhism has voiced its assertion and greater urge for recognition in the name of a separate Newar ethnic and cultural identity.

It is uncertain whether the present unique features of Newar Buddhism evolved locally or were part of common legacy with mediaeval Buddhism in Bihar. A comparison cannot be made now, since Buddhism long ago ceased to exist in India. The erosion in monastic values might have already begun to creep into the lives of the great Buddhist Tantric Pandits in North India from where the Newar Buddhists could have received their cue. While all this is speculative, in other terms of Newar social and religious life, Gellner places the features of Newar religion firmly in a South Asian setting.

Although Gellner's work is a comprehensive study of Newar religion, any discussion of Newar Buddhism cannot avoid confronting the issue of whether it has totally veered from its celibate monastic path, whether today 'it is

Hinduism in all but name', or whether the Vajracharyas are modelled on the Brahman priests. Anthropologists normally refrain from making value judgements on the culture of the group they are studying. But for Gellner these are questions he must confront centrally. He has reasoned, sifted through evidence in the Buddhist texts, cited opinions of Buddhist Newars, and defended their Buddhism for having remained true to the teachings of the religion by refuting criticisms such as those of Buddhist protestant purists, Theravadins and religious modernists. To Gellner, Sakyas and Vajracharyas are nothing but Buddhist monks in essence. They undergo the vow of celibacy and monkhood for four days during the ritual of initiation (*bare chuyegu*) for their young boys. Ritual thus plays a powerful role of mediation, and it is a sure means to attaining Buddhahood (enlightenment) for an individual. Among all the Newar Buddhists, the life of pious Vajracharya is the most ritual-ridden one. Similarly, Buddhist egalitarian ideals are not forsaken, and Gellner compiles emic views on this question as well. One should probably mention here that, in history, Newar Buddhism has never been challenged or looked down upon by the Hindu Newars. Malla kings were as generous in their patronage towards it as they were towards Hinduism. It is nothing surprising in view of the fact that traditional Saiva and Buddhist Newars grew up and shared single space, time, political, social, cultural and economic systems in the Kathmandu Valley together. Today the most vociferous critics of Newar Buddhism come from followers of newcomer Buddhist faiths and outsider.

The book is conceived in 12 chapters. Introductory matters in chapter 1 explain the aims and methods of study, treat historical background and questions, such as Newar ethnic and numerical politics, Newar cultural nationalists and Newar cultural identity, position and social status of Buddhist Newars vis-a-vis Hindu Newars and other caste Hindus, Newar urban and village milieu, and matters of general Newar ethnography. Chapter 2 focuses on Newar caste organization. A comparative perspective on the Buddhist and Hindu Newar castes is drawn. Gellner deals with the ritual organization of space in Newar settlements, more specifically into its three cities, likening them to the concepts of a *Mandala*, division of space into sacred and secular domains and layout of space in each domain in relation to caste.

Gellner's attempt at explaining away the castes of the Sakyas and Vajracharyas may be referred to here. Gellner argues that the reverential higher status of the Vajracharyas and Sakyas could be a 'given' thing to them by the state. They are not listed among the 64 caste divisions of the social organization of 'Jayasthitimalla'. Their higher status may only be representative of a 'spiritual hierarchy', implying no vertical stratification,

according to him. He cites Cantlie on Assam, where castes are looked upon not in terms of 'high' or 'low', but in terms of 'big' or 'small' (p. 45). Gellner takes this idea of 'two centres' to draw parallels for the Vajracharyas and Sakyas, who also may be said to represent a 'moral universe with a sacred and protected centre'. He suggests a fresh classification according a Hindu or Buddhist denominational division or identity to the Newars. Accordingly, only the upper castes may qualify as unambiguous Buddhist (Vajracharyas and Sakyas) or Hindu (Brahman Rajopadhyayas and Chathari Shresthas) sectarians. The rest of the Newars below them, for whom he coins the word 'ordinary Newars', seem to have no clear-cut religious affiliation. This, seems to contradict his own idea elsewhere in the book of the importance of the role played by the Buddhist laity (the Ure caste) in the sustenance of Buddhism.

Chapter 3 examines the historical relationship between Hinduism and Buddhism and its continuing form in Nepal. Commonalities and antagonisms are clearly shown. The much vaunted idea of Nepal's religious syncretism in popular and touristic writings has been treated with an academic resonance. The next two chapters discuss what probably constitute the basic elements of Newar Buddhist religion. Newar Buddhism is a theistic religion, centering on the key concept of worshipping the images of Buddha. Newar Buddhism (i.e. Mahayana Buddhism) diverges on a separate course of development by adding new transcendental concepts and ritual practices.

Gellner characterizes Newar Buddhism as a 'Three Way Religion': the disciples' Way, the Great Way and the Diamond Way. It is also a three-tiered religious system through which an individual Vajracharya has to pass in his life-time. At the actual level of doing, the 'Three Ways' religion translates itself variously. It requires adopting a psycho-moral world view laid down in it, and the scrupulous adherence to some key rituals it prescribes. The totality of religious activity is neatly summed up in a table (Fig. 15).

The sociology of religious typology is said to fall in two parts: obligatory practices and optional practices. Obligatory rites further divide into those inherited from one's family and caste (*kuladharma*) and the regular obligatory rites prescribed for an individual and built in his daily, monthly and annual religious duties. Similarly, optional rites split into what he terms 'supererogatory rites' done for extra merit, and 'instrumental religion', both being performed on an individual basis. His instrumental religion also includes having faith that illness is caused by malevolent spirits, and angry deities, and seeking cure through the services of a Vajracharya proficient in this medium. This last form is most probably a residual element taken from folk religious beliefs appended to Buddhism, which should have been ignored under the treatment of a soteriological religion, but could obviously not be

resisted from integrating into the scheme by an anthropologist.

The matters discussed up to chapter 5 provide a preliminary to the main treatment of religion arranged in the next five chapters (6-10). Chapter 6 describes the main elements of monastic Buddhism (*Sravakayana*) still embedded in the many ritual practices of the Sakyas and Vajracharyas. Chapter 7 outlines the Newar Buddhist's graduation to the Diamond Way (*Vajrayana*). It means embracing and enactment of the ideologies of pilgrimage, performance of life-cycle rituals, including that of the annual death-rites performed in the name of ancestors (*sraddha*), observance of religious fasts, and celebration of multiple other calendrical festivals. All these different forms of piety and religious acts are common to the Sakyas and Vajracharyas, the veritable monks of Newar Buddhism for Gellner, as well as for the Buddhist laity alike. The emphasis put in the Vajrayana religion on the diverse religious performances by its believers was the 'most important in the mobilization of the Buddhist laity' (p. 227). Gellner regards this single point to have saved Buddhism in Nepal, while overlooking it in India caused its disappearance.

Chapter 8 is wholly given to describing Newar *guthi*. Gellner's aim in treating the Newar *guthi* system so late in the book, and intergrating it within the body of the main religious discussion, is to point out two things in it, the principles of equality and territory in the working of the *guthi* and then to link these to the ideology of equality in classical Buddhism. However, *guthi* in Nepal need not be understood necessarily as a uniquely Buddhist contribution. More likely, its origin owes to the land system prevailing in Licchavi and pre-Licchavi times. The oldest *guthi* to be invented right from the earliest time seems to have been the lineage (*degu puja*) and death (*si*) *guthis*. Reference to *gosthis* (Sanskrit term for *guthi*) occurs in the Licchavi inscriptions (A.D. 5th-8th centuries). These *guthis* had existed parallel to the Buddhist monastic organizations of the time, the *Aryabhiksusamghas*. There were other forms of kindred group organizations in the Licchavi period, such as *devapancalis* whose structure and organization probably paralleled that of the *guthi*. Due to this popular *guthi* system in group organization and economic co-operation, wherein a commonly assigned piece of land formed the key financial basis to sustain it, *guthi* today has become a pan-Newar cultural heritage. The system of seniority according to age for determining head and members of the *guthi* committee should derive from the nature of the ancient agrarian extended household. So far as the system of rotation is concerned, the organization of the committee itself does not change, only the obligatory duties of members within it.

The Diamond Way culminates into a series of new cults which now rise up. For instance, the cult of the five Buddhas or the Cult of Cakrasamvara, the Tantric esoteric deity worshipped by all the Vajracharyas. The young Buddhist monk who had earlier entered the life of a married householder and took up to perform all the rituals prescribed for Buddhist laity, now ascends higher to become a full-fledged Vajracharya through mystic Tantric initiation rituals. The Vajracharya stands for a 'realized soul', who by achieving non-attachment and liberation, has attained his soteriological goals. Outwardly he may appear to have reversed the vow of monkhood, but in essence he continues to remain a monk. The use of Tantra and its various esoteric principles, symbols and ritual items in the life of a Vajracharya dominated by rituals, forms the subject of chapters 9, 10 and 11. Chapter 12 is a summing up and conclusion.

Throughout the book, the discussion on Newar Buddhism turns on the central issue of soteriology. Gellner has no doubts and asserts that Newar Buddhism is a soteriological religion. He sets out to say this from the beginning of the book. The characteristic features of Newar Buddhism, of which the Vajracharyas are the principal legatees today, are said to mark a decline from the pristine monastic form of this religion. The Vajracharyas have been made the targets of attack not only by the Theravadins and religious modernists, but also by their own Tuladhar clients. The Vajracharyas look particularly vulnerable in the face of such criticisms. They could suffer more setbacks and face the prospect of further erosion of the respect of their clients in the future.

Although an alien and relatively newcomer religion, the Theravada Buddhism is propagating itself aggressively and seems to be growing increasingly popular among the same Newar Buddhist clientele. Why should this be so? Why do the Vajracharyas seem to lose out to the Theravadins? It could be, despite Gellner's reasonings, that the soteriological claims of Newar Buddhism and the Vajracharyas' claim as the highest guardians and monks of traditional Buddhism are not convincing. Buddhist soteriology does not look credible without the exoteric practices of the vow of monkhood, celibacy and the life of worldly renunciation within it.

The problem of Newar Buddhism is that it claims to combine the functions of priesthood and world renunciation into a single activity. In contrast, the soteriological pretensions of Hinduism have never been seriously jeopardised, despite its many ups and downs in history (like any other major religion). This is because it did not do away with or forsake the idealism and practice of world renunciation sustained by its wandering ascetics and *sanyasins*. The Brahman does continue to fulfill his role from his place. He carries forth the role of a priest, religious preacher, and by virtue of this, retains his high

social rank. The Hindu ascetic and the Brahman are not competitive with one another, or bent on undoing one by the other, but are in a mutually complementary role to serve Hinduism. A Hindu world renouncer does not see the need to attack and erode the authority of the Brahman in carrying out his priestly duties and in leading the life of a virtuous Brahman. Nor does the Brahman see in the world renouncer a threat to his own existence and religious authority.

The organization and presentation of the material is excellent. Useful appendixes are given immediately at the end of the relevant chapters. One admirable style which Gellner consistently follows is to present the summary of his ideas in tables. He has also adopted the method of numbering sub-headings in each chapter. It has no doubt made cross-referencing easy, but one drawback of this style is that it restricts the flow of the narrative and somewhat renders it into a disjunctive reading. Gellner has solved the problem of providing a separate list of glossary for technical and indigenous terms by the use of the English equivalent of such term in the text first and by giving their local gloss in parenthesis. Occasionally, his choice of English equivalents reads awkwardly. One instance of this is his translation of *Kalasa* as 'flask'. 'Water-pot' would have been a better translation. Two exhaustive indexes at the end of the book further facilitate the use of the book. All said and done, it is an important and authoritative work on the Newars, written with great panache, insight, and scholarship.

– Prayag Raj Sharma

BOOK REVIEW

A Descriptive Grammar of Nepali and An Analyzed Corpus. 1991. Jayaraj Acharya. Georgetown University Press, Washington D.C. Pages XIII+378. Price: Not mentioned.

Jayaraj Acharya's *A Descriptive Grammar of Nepali and an Analyzed Corpus* (JRA) is a recent contribution in the tradition of Nepali grammar which runs along Ayton (1820), Turnbull (1887), Arjyal (1905), Singh (1911), Pande (1912), Dixitacharya (1913), Dahal (1974), Bhattarai (1976), Sthapit (1978) and Matthews (1984). Among them Arjyal (1905), Clark (1963), Dahal (1974), Sthapit (1978), Matthews (1984) and JRA are descriptive grammars. Clark (1963), Dahal (1974) Sthapit (1978) and JRA are based on linguistic principles. Dahal (1974) and Sthapit (1978) are descriptions of Nepali on a structuralistic model, and JRA is based on a tagmemic model. Sthapit (1978) takes both Nepali and Newari data for his analysis, but Dahal (1974) and JRA focus wholly on Nepali. Thus, in the tradition, we can say there are only three major reference grammars on Nepali—Clark (1963), Dahal (1974) and JRA. Dahal (1974) is a bit distracted also towards eastern and Dajeeling dialects, but JRA is firm and fixed on standard Nepali.

From the title of the book it is clear that there are two parts in JRA. The first part is *Grammar*, which builds a framework to analyze Guru Prasad Mainali's story *Naso*. The second part covers the whole story in Devanagari script, a translation of the Devanagari text, clause structure and phrase structure analyses of the story and vocabulary items, both in the order of occurrence and in alphabetical order. The first part contains a general introduction to the Nepali language, followed by descriptions of the sound system, the writing system, morphology and syntax of Nepali.

Jayaraj Acharya is not a new name in Nepali grammar, since earlier in 1980 he tossed a bombshell onto the tower of Sigdel's prestige by finding a one-to-one correspondence of influence of Nesfield's English grammar on Sigdel (1919). JRA is the same author's Ph. D. dissertation submitted to

Georgetown University, USA.

One of the important contributions of JRA to Nepali grammar is that the author has given all or most of the examples from Guru Prasad Mainali's story *Naso* in Nepali. Thus JRA seems to attain observational and descriptive adequacies required by a grammar. This system is not new in the Nepali grammatical tradition, since Ayton (1820) is based on three stories of Munshi, Turnbull (1887) on *Vaitalapaccisi* and Grierson (1916) on *Bhagavadbhaktivilasini*. JRA however, is a more powerful grammar than its predecessors.

The content of the book is as follows:

- Chapter 1 : A general introduction to the Nepali language;
- Chapter 2 : The nature of segmental phonemes in isolation and sequences;
- Chapter 3 : Syllable structure, phonotactics, phonetic stress, pitch, juncture, rhythm, pause, and intonation;
- Chapter 4 : The writing system, including numerals
- Chapter 5-6 : Form classes;
- Chapter 7-10 : Noun phrase;
- Chapter 11-12 : Adjectival phrase;
- Chapter 13-16 : Adverbial phrase;
- Chapter 17 : Verb phrase;
- Chapter 18-22 : Clause structures
- Chapter 23 : Description of the internal structure of a sentence;
- Chapter 24 : Reported speech and elliptical sentence.

There are three major descriptive works on Nepali grammar in general—Clark (1863), Dahal (1974) and JRA, but JRA has not utilized Dahal (1974), and he consequently missed many important generalizations already made by Dahal (1974).

In phonology, Bandhu *et al.* (1971), Dahal (1974), Sthapit (1978) and Pokharel (1989) are major research works of which JRA has only referred to Bandhu *et al.* (1971).

The major research works on syntax are Southworth (1967), Bandhu (1973, 1978), Dahal (1974), Sharma (1980), Wallace (1985) and JRA, but JRA has only read Southworth. Hence JRA has not followed the discipline of Sanskrit *guruparampara* (survey of literature).

Similarly on morphology, JRA has missed Dahal (1974), the only outstanding work.

JRA has followed Turnbull (1887), Turner (1921), Clark (1963, 1969), Pokharel and Dahal (1970), Hari (1971), Dahal (1974) in noting that the so-

called retroflex stops of Nepali are fronted (p. 16). Pokharel's (1989) palatographic and linguographic experiments find that those stops are apical alveolar, in contrast with affricates /c, c^h, j, j^h/ which are laminal alveolar. JRA is correct to note that retroflex is not a place of articulation, but manner (p. 19).

Pokharel (1989), with his palatographic, radiographic, spectrographic, kymographic and eschillographic experiments, has found loss of nasalized /O/, (JRA: 13) breathlessness of voiced aspirates in noninitial environments (JRA: 26, 73), longer nasalized vowels than their oral counterparts (JRA: 31) and intervocalic /h/ deletion (JRA, 'postvocalic': 74).

Grierson (1916) finds that there is lack of contrastive vowel length in Nepali. Turner (1931) Dahal (1974) and JRA support Grierson (1916).

Intervocalic 'h' deletion is first noted by Turner (1921) and supported by Turner (1931), Clark (1963, 1969), Hari (1971), Dahal (1974) and Sthapit (1978). We do not understand why JRA calls it 'postvocalic'.

Turner (1921) has already noted that Nepali affricates /c, c^h, j, j^h/ are alveolar rather than palatal. This observation is followed by Clark (1963), Bandhu (1971), Pokharel and Dahal (1970: 31), Hari (1971), Dahal (1974) and Sthapit (1978). Pokharel's (1989) palatographic experiments have also supported Turner (1921), while JRA (p. 19) has totally ignored his predecessors.

Srivastava (1962) has correctly located Nepali /n, l, r, s/ on the alveolar region. This observation is supported by Pokharel and Dahal (1970:31), Hari (1971), Dahal (1974), Sthapit (1978) and Pokharel (1989), but JRA (p. 19) labels them as dental.

JRA (p. 26) is correct to note that there is loss of contrast between /b, d, g/ and /m, n, ng/ after nasalized vowels.

In phonology, JRA has good observations on suprasegmentals (p. 36), rules of phonetic stress (pp 43-6), pragmatic use of glottal closure (p. 49) and grammatical role and functions of intonation (pp. 54-6). The extent of his detail in phonology extends even to the 'lengthening of high pitch vowel' (p. 57-9).

There are problems in JRA's phonemic chart (p. 63) as there is no logical sequence in the table. The Sanskrit system proceeds from larynx to lips (k, c, T, t, p); Henry Sweets and Daniel Jones adopted the reverse order but JRA has made a hodge-podge out of it. He failed to mention the allophonic bilabial and velar fricatives in the chart, although Clark (1969) and Hari (1971) have already noted their occurrence, and Pokharel's spectrographic experiments supported them.

In grammar, JRA is correct to note that the High Grade Honorific is common in actual social interaction (p. 80), that the comparative and

superlative constructions in Nepali are syntactic (periphrastic?) not morphological (p. 83), and that interjections are parenthetical minor semantically complete sentences (pp 85, 141). He has correctly associated the use of Nepali dative particle and animacy (p. 160). He gives a fine description of reported speech (p. 182-6) and explanation for the rule of gapping (p. 181).

There is no better description of Nepali clause analysis than JRA (pp 124, 171-6), although Bandhu (1973) is one of the milestones toward this direction.

JRA is equally correct to note the ambiguity between the nouns in apposition and compounds (p. 111). Pokharel's (1989 a) thesis that Nepali lacks post modifier is modified by JRA to read: "In certain instances the optional modifier slot occurs after the head slot" (p. 106) and his formula (p. 139):

1. SubCl = +Axis + Relator
2. SubCl = +Relator + Axis

However, JRA is suggested to make some minor corrections:

1. It was Grierson (1916), not Clark (1969), who used the term *Pahari* (p. 2) to denote a group of languages.
2. Nepali should be labelled 'Indo-Aryan' rather than 'Indo-European' (p. 2) is not correct in the context it is used.
3. In his map, Malayalam is missing and Urdu is located in Pakistan (p. 3)
4. His literature survey (pp. 7-10) is incomplete as the dictionaries of Balchandra Sharma, Pushkar Shamsar, Narendra Mani Adi and Paras Mani Pradhan are missing.
5. JRA claims 'to provide a detailed analysis accounting for all the items noted in previous grammatical descriptions of the language', 'an accurate description of the Nepali sound system: its segmental phonemes and their principal allophones' (p. 10). The above mentioned discussions clearly show that JRA attempts to bite off more than he can chew.
6. JRA says, "A comprehensive synchronic description of Nepali has never been attempted by any Nepali linguist" (p. 13). This statement is wrong because he has not gone through Dahal (1974) and Sthapit (1978).
7. The claims of JRA that "the use of Nepali as a literary language was first made only by Bhanubhakta Acharya" is wrong (cf Sharma 1982).
8. JRA's definition of syllables ("The environments in which the set of Nepali consonants and vowels occurred are called syllables", p. 14) needs correction.
9. Pokharel (1989)'s spectrographic formant chart of Nepali vowels shows that Nepali /a/ is the backmost vowel. The Chomsky and Halle (1968) system calls it a low back vowel, and Daniel Jones would name it a low

mid back vowel. Hence JRA's label "mid central vowel" (p. 15) needs modification.

10. In the literature of phonetics, laryngeal vibration (i.e. voicing) is not considered a manner of articulation, something JRA should modify (p. 17).
11. Allophones of /s/ which are given by JRA between slanted strokes (p. 27), should be transcribed within square brackets.
12. The velar nasal /ng/ occurs in word-initial position in the following words:
 ngyAknu 'to kick down'
 ngyAngro 'a mumbling person'
 JRA (p. 27) should note this.
13. JRA has missed lip-rounding in the description of vowels (p. 30).
14. According to JRA (p. 32), there is no syllable initial cluster in Nepali, but the word *prasTa* 'clear' (Sanskrit *spaSTa*) is a counterexample to JRA.
15. JRA is suggested to revise his claim that 'we can reasonably distinguish long consonants from geminates, at least in Nepali', by reading the chapter on length by Pokharel (1989). JRA has tried to be phonetic, but has missed several important generalizations already dealt with his predecessors. He writes several of his own futile impressionistic generalizations instead.
16. It is not clear whether JRA's statements on phonetics are based on experimentation or they are just hypothetical gossip. Hence, JRA's sonority scale (p. 40) is also dubious. His claim that "a light vowel becomes a heavy syllable if the syllable is nasalized" (p. 41) is wrong to cite Laxmi Prasad Devkota's last line from his poem *CAru: Aⁿsu sibAya rasilo aru Aundaina*. The underlined nasalized vowel *uⁿ* makes only a light syllable, not a heavy one.
17. JRA misinterprets PANini (1.2.29) to be talking about muscular tension or stress, (p. 43) but, it is in fact about rising pitch.
18. JRA's examples of emphatic stress' (p. 48) are, in fact, examples of intonation.
19. JRA is not consistent in the transcription of the bilabial approximant *va* of Devanagari alphabet. Sometimes (p. 62) he writes /v/ and sometimes /w/. In fact the Nepali bilabial approximant is not labio-dental (as in Sanskrit, Marathi and Kannada). It is a new phoneme developed in Nepali, and the Nepali writing system is not consistent in the transcription of Nepali /w/ and /v/ in Sanskrit borrowings (cf p. 72).
20. In Sanskrit, all sibilants are realized retroflex after /K/. Thus one conjunct for /KS/ is justified. JRA's claim that the *tra* cluster does not

occur in Nepali (p. 63) is wrong (cf *bhitra* 'inside').

21. JRA notes that about 80% of Nepali words are borrowed from Sanskrit (p. 63), but he does not mention by whom and where was this computation done.
22. The consonantal stroke (\) is called *hal* in Sanskrit not *VirAm* (cf. p.65).
23. About the correct definition of *anusvAra*, JRA is suggested to read Hoernle (1880) and not be confused with a symbol for a nasalized vowel and *anusvAra* of Sanskrit (cf. p. 70)
24. We cannot understand why JRA wants to treat *choro* 'son' and *chori* 'daughter' as separate lexical items independent of each other (p. 28). We think it is imperative for the author to read Pokharel (1991). JRA does not mention direct and oblique cases as inflections, but he considers the periphrastic plural marking particle *haru* and other case marking postpositional particles as inflections (p. 78,99) This leads him in to serious theoretical problems. On the other hand *rAmro* (masculine), *rAmri* (feminine) and *rAmrA* (Plural) JRA considers under inflections of adjective (p. 79).
25. JRA's generalizations on tense, mood and aspect are to be modified by reading Dahal (1974) and Pokharel (1992 a,b,c)
26. JRA thinks postpositions are uninflected (p. 85) and forgets about the inflections of - *ko* (masculine) - *ki* (feminine) and - *kA* (Plural).
27. JRA omits the modifier-noun agreement and only notes the Subject-verb agreement (p. 104).
28. JRA's classification of nouns is traditional.
29. JRA's list of family names, etc. (pp. 104-5) is not linguistic.
30. *u-series* is missing from the list of pronominals (p. 130).
31. The label 'postpositional noun phrase' (p. 132) is a misnomer. It should rather be called 'postpositional phrase'. The author seems to be misguided by the ergative and dative postpositions which generally do not change the grammatical category of the phrase.
32. *ko* is the postposition, which according to JRA (p. 133) occurs only with human nouns, but in his example *AsAko badala* 'instead of hope', *Asa* 'hope' is not a HUMAN noun.
33. *Aphu* 'self' is not nasalized in standard Nepali (cf. p. 137).
34. There are unnecessary repetitions in JRA.
35. About auxiliary verbs, JRA is insufficient. He is suggested to read Bandhu (1973), Dahal (1974), Sharma (1980) and Pokharel (same volume) on compound verbs to modify his generalizations.
36. The list of Dative-subject verbs (p. 150) is incomplete.
37. He has forgotten Bandhu (1973) in his clause analysis (Chapter-18)

38. JRA misuses the label 'ergative' (p. 167) (see Dixon 1979).
39. Optative mood is missing from JRA, although it is found in the data.

In spite of the problems, JRA is a good, easy reference grammar of Nepali. Teaching of Nepali reported speech, stress, intonation, clause analysis, nominal and verb phrases together with the use of their modifiers and indeclineable particles has been definitely made easier and a bit more systematic by the use of JRA. Some of the shortcomings mentioned (and others that have not been mentioned due to short space and time) will hopefully be revised and modified in JRA's later editions.

References

- Acharya, Jayaraj, 1980. *Traditional Grammars: English and Nepali*. Kathmandu: Author.
- Arjyal, Birendrakesari, 1905. *Nepali VyAkaraNa*. In: Acharya (1980).
- Ayton, J.A., 1820. *A Grammar of the Nepalese Language*. Calcutta: Philip Pereira.
- Bandhu, Chudamani, 1973. Clause patterns in Nepali. In: *Clause, sentences and discourse patterns in selected languages of Nepal*, II (ed) Austin Hale and David Walters. Norman: SIL, 1-97.
- , 1978. *Relativization in Nepali*. Ph. D. thesis. TU.
- , B.M. Dahal; A. Holzhausen and Austin Hale, 1971. *Nepali segmental phonology*. (mimeo).
- Bhattarai, Rohini P., 1976. *Brihat Nepali VyAkaranA*. Kathmandu: Royal Nepal Academy.
- Clark, T.W., 1963. *Introduction to Nepali: A first year course*. Cambridge. Mouton.
- , 1969. Nepali and Pahari. In: *Current trends in linguistics* (ed). Thomas a. Sebeok, The Hague: Mouton, Vol. 5, 249-76.
- Chomsky, Noam and Morris Halle, 1968. *The Sound Pattern of English*. Newyork: Harper and Row.

Dahal, Ballabh Mani (1974). "A description of Nepali Literary and Colloquial". Ph. D. Thesis, University of Poona.

Dixitacharya, Bishwamani (1913). *Gorkha VyAkaraNa Bodha*. Kathmandu.

Dixon, R.M.W. (1913). Ergativity. *Language*, 59-138.

Grierson, G.A. (1916). *Linguistic survey of India*, Vol. IX, Part IV, 1-100.

Hari, Maria (1971). *Conversational Nepali*. Kathmandu: SIL.

Hoernle; A.F. Rudolf (1880). *A Comparative Grammar of the Gaudian Languages with special reference to the eastern Hindi*. London: Rubner.

Matthews, David (1984). *A Course in Nepali*. London School of Oriental and African studies, University of London.

Panini: *ASTAdhyAyi* (1.2.29).

Pande, Hemraj (1912). *Gorkha Bhasha Vyakarana Chandrika*. Kathmandu.

Pokharel, Madhav P. (1989). *Experimental Analysis of Nepali Sound System*. Ph. D. thesis. University of Poona.

----- (1989 a). Order of meaningful constituents in Nepali. *Contributions to Nepalese Studies* 16:83-101.

----- (1991). Nepali bhAsAko linga: sinhAvalokan. *Curriculum Development* 27.1:1-15.

----- (1992 a). Nepali KriyAko bhAv. *Madhuparka* 277.

----- (1992 b). Nepali kriyAko kAl. *Madhuparka* 278.

----- (1992 c). Nepali kriyAkA kAlko paksa. *Madhuparka* 280.

----- (same volume). Compound Verbs in Nepali. *Contributions to Nepalese Studies*.

Pokharel, Balkrishna and B.M. Dahal (1970). *Dvani-prakriyA ra dhvani siddhAnta*. Biratnagar: Pustak SansAr.

- Pradhan, Parasmani (1920). *Nepali VyAkaraNa*. Kathmandu: NBPS.
- Sharma, Taranath (1980). *The Auxiliaries in Nepali*. Ph. D. thesis. University of Wisconsin, Madison.
- (1982). *Nepali sAhityako itihAs*. Kathamandu: Sankalpa PrakAsan.
- Sigdel, Somnath (1919). *MadhyachandrikA*. Kathmandu.
- Singh, Jaya Prithvi B. (1911). *PrAkrit VyAkaraNa*.
- Southworth, Franklin C. (1967). *Nepali Transformational Structure: A Sketch*. Poona. Deccan College.
- Srivastava, Dayananda (1962). *Nepali Language, its History and Development*. Calcutta: Calcutta University Press.
- Sthapit, Sishir K. (1978). *English, Nepali and Newari: A Comparison and its pedagogic applications*. Ph. D. thesis, University of Poona.
- Turner, R.L. (1921). Specimens of Nepali. *The Indian Antiquary* 50:84-92.
- (1931). *A Comparative and Etymological Dictionary of Nepali Language*. London: Routledge and Kegan Paul.
- Turnbull, A. (1887). *The Nepali Grammar and Vocabulary*. Darjeeling: NL. Roy.
- Wallace, William D. (1985). "Subject and Subjecthood in Nepali: An Analysis of Nepali Clause Structure and its Challenges to Relational Grammar and Government and Binding". Ph. D. Thesis. University of Illinois. Urbana-Campaign.

– Madhav P. Pokharel

Notes to Contributors

Manuscripts should be typed double-space on A4 paper with a 4 cm margin on all four sides. The top copy should be submitted and photo/carbon copy retained by the author. The author should underline nothing except words which are to be italicised. Notes and references should be typed double-spaced on separate pages and will be included at the end of the article. The text should refer to notes numbered consecutively throughout the article, using raised numbers; bibliographical references should be cited in the text by the author's last name, date of publication, and page number, e.g., (Bista 1965:105) or if the author's name is mentioned in the text, by the date and page reference only, (1965:105). Entries in the references should be in alphabetical and chronological order of authors. They should include the details in the following order: name of the author (s)—surname first, date, title, name of the periodical, volume number (Arabic numerals to be used throughout), pagination (for articles in periodicals and books with several authors), place of publication (and name of the publisher for a book). Examples of the style to be used are as follows:

Bista, D.B. 1965. *People of Nepal*. Kathmandu: Ratna Pustak Bhandar

Dhungel, Basundhara. 1980. "The Newars." In Sudha Paneru (ed.), *Traditional and Prevailing Child-Rearing Practices Among Different Communities in Nepal*. Kathmandu: Centre for Nepal and Asian Studies, Tribhuvan university, pp. 31-53

Shrestha, Ananda. 1979. "Error Analysis." *Contributions to Nepalese Studies*, 6:2, pp. 1-9.

Shrestha, Ramesh. 1977. "Adult Literacy in Nepal: a Report." Kathmandu: Centre for Nepal and Asian Studies, Tribhuvan University. Mimeographed.

Stone, Linda. 1977. "Illness, Hierarchy and Food Symbolism Hindu Nepal." Unpublished Ph. D. Thesis. Brown University.

Tables should be submitted on separate pages, numbered and with headings. Maps and text figures should be drawn in black waterproof ink about twice the intended final size, with lettering in soft pencil. Notations in the text should indicate where these are to appear. Plates should not be less than intended final size. They should be printed on glossy paper. They should be titled and numbered.